Deindustrialization, Decarbonization and Climate Investment: A Green Bullet for a Rusty Belt?*

Ryan Pike†

August 24, 2026
Word Count including references: 12,600

Abstract

Green industrial policy (GIP) is an increasingly common intervention to ease costs from the ecological transition. It is unclear, however, if governments benefit from its provision. I argue that GIP, rather than tackling decarbonization only, is electorally efficacious when addressing deindustrialization writ large. This broader conceptualization provides insights on where it will win the incumbent votes: in places with increased deindustrialization risk arising from both globalization and decarbonization. Varied benefits due to compositional differences in local industry and emissions mean GIP is more likely to win votes in these doubly-pressured places, but not elsewhere. I test this argument with geo-located investment data from the Inflation Reduction Act, leveraging identifying variation in investment status in November 2024 in a difference-in-differences framework. While GIP's average impact is null, doubly-pressured communities and individuals shifted 2-3 p.p. towards the Democrats following investment. A case study of Michigan provides evidence of material and symbolic benefits.

*I thank Parrish Bergquist, Diane Bolet, Sarah Bush, David Cerero, Alessia Invernizzi, Shiro Kuriwaki, Didac Queralt, Melissa Pavlik, Luke Sanford, Drew Stommes, and Jen Wu alongside participants at EPSA and APSA 2025, and the Yale IR Workshop for helpful feedback.

†Postdoctoral Scholar, Univeristy of California Berkeley Economy and Society Initiative, ryan.pike@yale.edu

Introduction

To avoid the worst consequences of climate change, states need to reverse a century of rapidly rising CO_2 emissions in less than a quarter of that time.[1,2] Recognizing the inadequacy of 'stick-based' policies alone (e.g., carbon emission taxes), many governments have increasingly offered a carrot: green industrial policy (GIP). GIP provides financial incentives to firms to invest in decarbonization innovations or to develop nascent green industries (Allan and Nahm, 2024). These include subsidies for clean energy and electric vehicles alongside innovation assistance to decarbonize polluting sectors such as cement and steel. Whereas carbon taxes are economically efficient but electorally risky, with voters highly sensitive to their costs (Ansolabehere and Konisky, 2014; Beiser-McGrath and Bernauer, 2024; Bechtel and Scheve, 2013; Bechtel, Scheve and van Lieshout, 2021), it is an open question how this carrot-based approach is received by voters. Answering this question is essential not only because of the substantial fiscal outlays for GIP since the COVID-19 pandemic (more than \$1 trillion in the OECD),[3] but also to understand the types of climate policies that are environmentally ambitious *and* electorally sustainable.

This paper investigates the electoral impact of GIP. Existing research on the electoral consequences and preferences for carrot-based climate policies has predominantly focused on compensatory measures imposed after job loss (Bolet, Green and González-Eguino, 2024; Gaikwad, Genovese and Tingley, 2022; Gazmararian and Tingley, 2023; Stutzmann, 2025), typically in coal country. This research demonstrates that compensation may thwart backlash from individuals and communities who, absent policy to cushion the energy tran-

[1] See Ritchie, Roser and Rosado (2020) for trends in CO_2 emissions globally and nationally since the Industrial Revolution.

[2] The World Economic Forum estimates that 2024 was "peak emissions" from energy usage. See https://www.weforum.org/stories/2024/11/peak-energy-emissions-a-historic-moment-overshadowed-by-the-endurance-of-fossil-fuels/.

[3] See: https://www.oecd.org/en/topics/green-industrial-policies.html. This of course omits China, a major GIP provider.

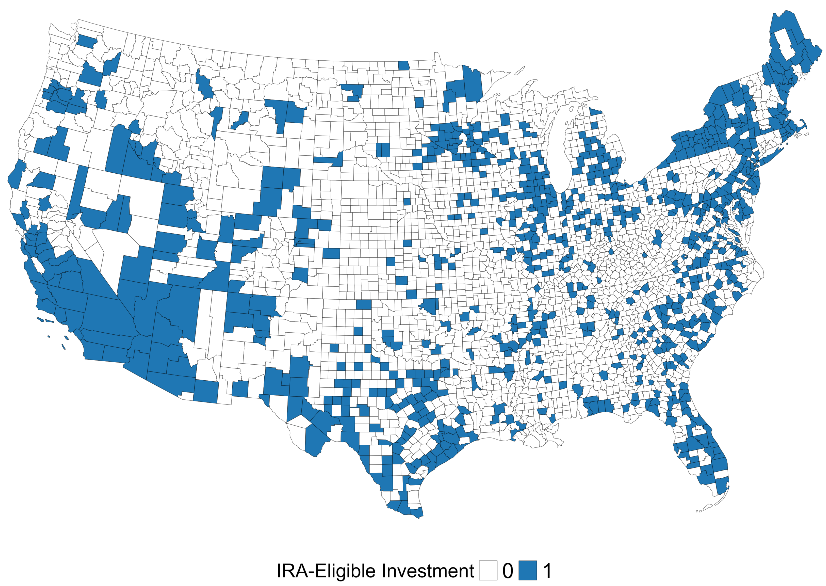
sition, are likely to shift rightward and reject further climate action (Gazmararian, 2025; Heddesheimer, Hilbig and Voeten, 2025; Voeten, 2025). The green transition then, as type of market transformation, may be further enabled by policy that alleviates concentrated costs (Ruggie, 1982).

GIP, however, is fundamentally different from unemployment insurance or retraining. By targeting investment at firms to decarbonize production or manufacture novel green commodities, GIP is not a traditional compensatory measure: firms, not the unemployed, are its initial beneficiaries. Consequentially, GIP is also not targeted strictly at fossil fuel country. Figure 1 visualizes investments eligible for tax incentives under the Inflation Reduction Act (IRA), the largest climate spending bill to date in the United States. GIP-spurred investment is geographically diverse; it is not confined to coal nor fossil fuel country. Recent public opinion research on the IRA demonstrates voters are aware of policy implementation and attribute responsibility across several political actors (Gazmararian, Jensen and Tingley, 2026). Electoral analyses find limited aggregate effects of IRA investment (Li, 2025; Miao, Finnegan and Andersson, 2026), despite this public awareness.[4] Given its widespread implementation across a variety of local economic contexts as mapped in Figure 1–in contrast to targeted compensation designed for fossil fuel communities–an aggregate null likely masks important variation between areas with different industrial composition. Put differently, unless voters in West Virginia, the epicenter of U.S. coal country, and North Carolina, a fossil-poor state, react uniformly to investment, prior intuition based on compensation to coal country provides insufficient theoretical guidance for understanding GIP's political impact. Otherwise, a more general explanation of GIP's electoral consequences is needed.

I argue that GIP is more likely to win incumbents votes when it decreases the risk of

[4] Gazmararian, Jensen and Tingley (2026) find that more than 40% of individuals attribute responsibility of investments to the Biden Administration, for example.

Figure 1: Confirmed Capital Expenditure Applicable for IRA Tax Credits



Note: Counties are shaded blue if they received any type of investment by firms between 2022-2024 that is eligible under the tax credits in the U.S. IRA.

deindustrialization, not strictly the costs of the green transition *alone*. In many communities, climate regulation costs are the latest chapter of a decades-long story of economic erosion and decline that began with globalization and import competition (Autor et al., 2025; Baccini and Weymouth, 2021; Broughton, 2014; Ternullo, 2024). Further deindustrialization due to decarbonization adjustment costs makes climate and trade mutually reinforcing in the industrial heartland. In these doubly-pressured communities, GIP is an effective vote winner given its ability to provide a combination of material and symbolic benefits that address both economic transformations. For example, materially it may insulate against the further loss of high paying jobs in emission intensive industries (Allan and Nahm, 2024), or provide a novel source of tax revenue in areas that witnessed declining public services (Feler and Senses, 2017). Symbolically, alongside these material changes, it may alleviate status concerns and reinvigorate the industrial heritage in communities at trade and climate risk (Baccini and Weymouth, 2021; Bergquist et al., 2020; Kim and Pelc, 2026). This suggests an interpretation of GIP as *ex ante insurance* for decarbonization risk and *ex post compensation* for trade exposure in doubly-pressured communities. Whether a community is doubly-pressured or not is due to differing local industrial structure which provides insights into why ample exposure to *both* shapes electoral reward. Places with substantial emissions, but little trade exposure are typically fossil fuel-dominated; GIP provides little insurance as investment displaces rather than protects the local economy. Likewise, in places with substantial trade exposure but few emissions, a legacy of light rather than heavy industry receives fewer compensatory benefits: advanced manufacturing investment has less to reconnect with alongside the lower costs of decarbonization. In doubly-pressured communities, by contrast, with substantial *manufacturing* emissions and past trade exposure, I expect GIP to win the incumbent votes.

I test this argument in several steps using the U.S. IRA as a prominent example of GIP in recent years.[5] The IRA provided two tranches of tax credits to support the build-out of clean energy on the one hand and decarbonized and advanced manufacturing on the other. As such, the IRA targets assistance towards decarbonizing existing industry and establishing fledgling green ones, typical policy objectives of GIP (Allan, Lewis and Oatley, 2021; Allan and Nahm, 2024; Rodrik, 2014). First, leveraging geo-located data on IRA-spurred investment, I assess the impact of GIP on presidential voting behavior in a difference-in-differences framework. I address selection bias in investment by focusing on counties having experienced the physical impact of investment (i.e., under construction or operational) versus only its announcement, and use Census data to generate weights

[5]Other prominent examples of GIP include *France Relance*, a COVID-19 recovery stimulus package. Similar COVID recovery plans partially funded by the EU include Spain's *Plan de Recuperación, Transformación y Resiliencia* and Germany's *Aufbau- und Resilienzplans*.

accounting for varying investment levels. Measuring exposure to deindustrialization risk with local import data and plant-level emissions, I categorize counties as either doubly-pressured or not. These plant-level data let me further split emissions based on industry of origin, in particular manufacturing versus fossil fuels.

I find no incumbent benefits from GIP *in general*; however, this average result mask consistent effects in counties doubly-pressured by globalization and decarbonization. In these counties, I find investment caused between a 2 and 3 p.p. increase in the incumbent Democratic vote share. This result is driven by counties with manufacturing, but not fossil fuel, emissions. Classifying counties as either exposed to a single dimension or both, I find positive marginal effects only when both globalization exposure and decarbonization risk are present. Two extensions probe the internal and external validity of these national-level results: (1) using the Cooperative Election Panel Survey, I find registered voters in doubly-pressured counties were 3 p.p. more likely to vote Democratic following investment, easing ecological inference concerns; and (2) using analogous data from France, I find the incumbent Emmanuel Macron won votes in doubly-pressured communities following investment.

This national-level analysis identifies the causal effect of GIP on voting behavior. It cannot however probe mechanisms related to material and symbolic benefits arising from firm investments, or the visibility of said investments. To do so, I gather evidence from Michigan, where ample investment, common county size and local newspaper markets make it appealing from a design perspective. First, I consider local news coverage of clean investment which highlights the tax and employment benefits it brings to the immediate community, as well as local public planning deliberations. Furthermore, GIP investments are more likely to be covered in doubly-pressured areas than elsewhere. I show similar trends in media coverage in Wyoming and Indiana, two states which differ economically and politically from Michigan. In doubly-pressured communities coverage is framed in terms of a manufacturing revival and not just additional tax revenue, but also the replacement of previously lost tax sources due to historical job loss. This coverage suggests voter awareness, but also variation in benefits within counties.

Finally, building on the insights from the media analysis, I assess whether vote trends varied within counties given that benefits were at times town- or city-specific. To assess this claim, I collect precinct-level voting data from 2016 to 2024, allowing a comparison of micro-level voting patterns at varying distances from the same investment site within a given Michigan county. I find that a standard deviation increase in distance from investment is associated with a 1 to 1.5 p.p. decrease in Democratic vote share. This spatial decay is only evident in doubly-pressured counties, elsewhere there is no intra-county variation in electoral behavior following investment.

This article contributes to several lines of research. First, it provides theory and evidence on the electoral consequences of GIP, an increasingly common policy lever (Meckling, 2021; Juhász et al., 2025; Allan and Nahm, 2024; Breznitz and Gingrich, 2025). Prior to the 2024 election, commentary placed substantial faith in the electoral efficacy of the IRA.[6] The subsequent re-election of Donald Trump induced an equal output of critiques of the IRA,[7] alongside a growing body of research demonstrating the policy's aggregate electoral inefficacy. This emerging consensus provides credible evidence of an absence in aggregate of incumbent rewards from policy (Li, 2025; Miao, Finnegan and Andersson, 2026), perhaps due to diffuse implementation attribution (Gazmararian, Jensen and Tingley, 2026).

[6] See, for example, news coverage on the 1-year anniversary of the policy's passage: Baker, P. August 16, 2023. "For Biden, celebrating what a law did rather than what it did not." *The New York Times*. https://www.nytimes.com/2023/08/16/us/politics/biden-inflation-reduction-act.html; or Fadel, L. and D. Walsh. August 17, 2023. "Schumer touts Inflation Reduction Act as a way for Democrats to win voters." *NPR*. https://www.npr.org/2023/08/17/1194349583/schumer-touts-inflation-reduction-act-as-a-way-for-democrat-to-win-voters.

[7] See, for example: Levien, M. November 23, 2024. "Why the IRA didn't help Democrats." *The Jacobin*. https://jacobin.com/2024/11/ira-democrats-energy-workers-trump.

I find a similar aggregate null effect with a different design. However, the present study provides an important corrective to this debate on GIP's electoral efficacy, both popular and scientific: the IRA, in places with substantial, mutually reinforcing economic risk to decarbonization and globalization, won the Democrats votes.

Second, the findings demonstrate that less-direct policy interventions such as GIP can shift voting behavior when addressing core socio-economic risks (Pierson, 1993; Mettler, 2007; Campbell, 2012; Hamel, 2025). Understanding the electoral implications of market-based policy interventions, such as subsidies, is important as these policies are often pitched as a means of thwarting nationalist-populist parties and resistance to the green transition and globalization in many post-industrial societies.[8] The analysis speaks to this question: GIP can be effective in blunting the rightward shift associated with unembedded economic transformations (Autor, Dorn and Hanson, 2013; Broz, Frieden and Weymouth, 2021; Colantone and Stanig, 2018; Gazmararian, 2025; Heddesheimer, Hilbig and Voeten, 2025). This capacity to win votes depends, however, on joint local exposure to decarbonization and globalization; by illuminating the common threat of deindustrialization in both, this study provides a theoretical explanation of green policies that incorporates spatial covariation in emissions and industry (Besley and Persson, 2023; Colgan, Green and Hale, 2021). This enriches existing political economy approaches distinguishing between polluting "brown" and non-polluting "green" industries (e.g., Bechtel, Genovese and Scheve (2019); Bolet, Green and González-Eguino (2024); Gaikwad, Genovese and Tingley (2022); Heddesheimer, Hilbig and Voeten (2025); Stutzmann (2025), but see Kupzok and Nahm (2024)). More generally, this overlap between trade and climate and its political consequences speaks to a long-standing literature in political economy that considers how state intervention cushions market forces (Polanyi, 1944; Ruggie, 1982; Przeworski, 1996; Rickard, 2018).

[8] On the political framing of these policies, see Appendix A.

Theoretical Framework

In this section, I synthesize arguments from existing research on the political consequences of trade exposure, preferences and behavior towards climate policies, and policy feedback more generally to develop a theory of the varied electoral impact of GIP. To be electorally effective, GIP, I argue needs to simultaneously counter local socio-economic narratives of decline arising from relative material deprivation, as well as the erosion of local identity that accompanies it. In post-industrial societies such as the United States and Western Europe, this narrative of decline is structured around two dimensions of economic change: (1) past manufacturing job loss from trade exposure; and (2) continued job loss due to adjustment costs from prospective (or increasingly stringent) climate policies. From these two dimensions of economic risk, namely globalization and decarbonization, I delineate four ideal types of communities based on their exposure to adjustment costs and the resulting deindustrialization from these two economic transformations.[9]

My argument, drawing from these ideal types and from the industries that compose them, is that we should expect GIP to increase voter support predominantly in communities facing threats from *both* economic transformations. Acknowledging that GIP is *both* a climate and an industrial policy, I expect electoral rewards specifically in communities doubly-pressured by *both* globalization and decarbonization compared to communities with exposure to either or neither dimension. By assisting the development of novel clean

[9] I focus on trade-induced job loss as the primary antecedent condition for which GIP investment may operate in a compensatory fashion given that the U.S. has no federal carbon-pricing policy similar to the EU Emissions Trading System. While market forces have facilitated a shift from coal to natural gas, there is not a policy placing a price on carbon. Regardless, the insight that green investment may act as compensation and/or insurance still holds in other contexts with carbon prices. If carbon pricing has facilitated further job loss, then it could simultaneously compensate and insure along a single dimension of carbon emissions intensity. Furthermore, while automation has likewise induced manufacturing job loss (Acemoglu and Restrepo, 2020), the public (mis)attribution of import competition as the driver of job loss and the politicization of trade (Mutz, 2021) motivates my choice of import competition as one of the primary dimensions of deindustrialization risk.

manufacturing or decarbonizing existing industrial production in these doubly-pressured communities, GIP can *compensate* economic losers from globalization *ex post*, and simultaneously *insure* economic losers from decarbonization *ex ante*. This simultaneous activation depends on industry and emissions composition, which vary systematically across the four types. Ultimately, I theorize that GIP's electoral effect will be limited to doubly-pressured communities, those with ample trade exposure and *manufacturing*, not fossil fuel, emissions.

Local Exposure to Globalization and Decarbonization

Over the past decade, an expansive literature has assessed the impact of globalization, primarily via trade exposure,[10] to a variety of political and economic outcomes (Autor, Dorn and Hanson, 2013; Autor et al., 2020; Ballard-Rosa et al., 2021; Bez et al., 2023; Colantone and Stanig, 2018; Feigenbaum and Hall, 2015; Meyerrose and Watson, In Press; Scheve and Serlin, 2023). Economic contraction in communities experiencing adjustment costs from globalization has shifted communities to the right (Gidron and Hall, 2017; Colantone and Stanig, 2018; Hochschild, 2018; Gidron and Hall, 2020), leading to an embrace of more polarized (Autor et al., 2020) and authoritarian viewpoints (Ballard-Rosa et al., 2021). In the United States, this literature documents how deindustrialization, especially of low-cost manufacturing (Autor, Dorn and Hanson, 2013), decreased incumbent support (Jensen, Quinn and Weymouth, 2017), increased anti-globalist beliefs (Bisbee and Rosendorff, 2024), and led to greater polarization among the electorate (Autor et al., 2020). Economically, the longer term impact of import-induced deindustrialization has been a replacement of manufacturing jobs with lower productivity service positions via generational turnover or migration in-flows (Autor et al., 2025).

[10] See (Scheiring et al., 2024) for a recent overview of both the trade and non-trade impacts of globalization.

Accompanying these economic consequences are perceptions of the diminished status of local identity which may moderate the material consequences of job loss (Rodrik, 2021). Kim and Pelc (2026), for instance, find that in industrial hubs, or areas with substantial concentration of interrelated industries, perceived status decline due to manufacturing job loss was larger than elsewhere. Reductions in manufacturing employment present a fundamental threat to local identity in these hubs, leading to stronger Republican performance. Industry, as an identity source that varies geographically, amplifies the political consequences of trade exposure. Baccini and Weymouth (2021) provide similar evidence, but based in demographics: Following manufacturing job loss, White voters were more likely to vote for Trump in 2016 compared to non-White voters in part because of the perceived loss of relative status. Globalization, then, imposes both material and symbolic consequences on communities exposed to its adjustment costs.

In a similar fashion, increased calls for greater climate action, and therefore prospective adjustment costs arising from decarbonization, have led scholars to consider the material and symbolic bases of climate preferences and behavior. Individuals and firms with emissions-generating assets are, therefore, more likely to oppose ambitious climate action due to the concentrated adjustment costs they face (Colgan, Green and Hale, 2021; Genovese and Tvinnereim, 2019; Vona, 2019). In Europe, more stringent climate regulation has decreased industrial emissions (Dechezleprêtre, Nachtigall and Venmans, 2023), in part due to the flight of emissions-intensive firms (Thombs, Zhang and Sovacool, 2025); firms and industries faced with regulatory and trade pressure are particularly opposed to greater climate action (Genovese, 2019). Among the public, prospective climate adjustment costs likewise shape preferences (Bechtel, Genovese and Scheve, 2019) and behavior (Gazmararian, 2025; Heddesheimer, Hilbig and Voeten, 2025; Voeten, 2025). Recognizing the risk of employment loss due to climate action, Heddesheimer, Hilbig and Voeten (2025) provide evidence from Germany of the rightward shift of communities with substantial emission-intensive employment. In a similar vein, following the fracking revolution which replaced coal with natural gas in the energy supply, coal communities, once staunch supporters of the Democratic party, have drifted rightward in the U.S. (Gazmararian, 2025). Absent government intervention to insulate workers and communities from these material costs, parties on the right benefited in a similar fashion to the backlash against globalization.

Decarbonization, through its transformation of production and consumption patterns, likewise challenges the social status quo. Communities and individuals with carbon intensive ways of life see a threat to their identities and therefore either resist aggressive climate policy or seek compensation. Local status concerns drive individuals in fossil fuel country to favor forms of compensation that benefit the entire community, rather than just those individuals who suffered job loss (Gaikwad, Genovese and Tingley, 2022). Resistance to climate policies that threaten coal communities' way of life are particularly salient in driving preferences for an embedded green transition. In coal communities affected by the fracking revolution, federal regulation was blamed for the diminished status of the community (Gazmararian, 2025). Status concerns likewise shape the gender climate opinion and support gap in many post-industrial societies (Bush and Clayton, 2023; McCright and Dunlap, 2011): Men facing greater adjustment costs are more likely to oppose climate policies in wealthier countries. Absent policy intervention, then, communities facing concentrated adjustment costs from the green transition are expected to resist these policies and support right-wing candidates who oppose any climate action.

Taken together, both globalization and decarbonization present concentrated adjustment costs to communities with industrial production; both threaten deindustrialization. These economic transformations bring with them changes to local production that have immediate material impacts, but also accompanying immaterial, or symbolic, consequences.

While the initial impacts of globalization have largely played out, climate mitigation's local ramifications remain. Rather than treat these dimensions as independent, I argue that their spatial overlap creates a unique type of community whose exposure to *both* globalization in the past and decarbonization in the future makes it fundamentally different from either alone. In what I call *doubly-pressured communities*, the material and immaterial consequences of globalization and decarbonization are mutually reinforcing: community economic prospects and identity already diminished by globalization face a second spell of economic dislocation due to decarbonization, making any cumulative adjustment costs particularly acute. GIP is particularly adept at addressing these mutually reinforcing adjustment costs, but not either alone.

Table 1: Adjustment Costs and Community Type

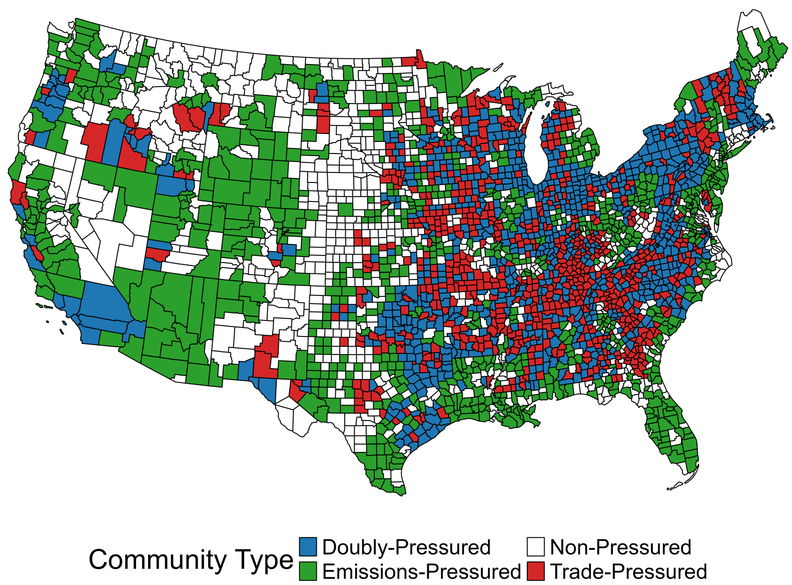
		Decarbonization Exposure	
		Low	**High**
Globalization Exposure	**Low**	Non-Pressured	Emissions-Pressured
	High	Trade-Pressured	**Doubly-Pressured**

Four Types of Local Economies

Dichotomizing exposure as either high or low to decarbonization and globalization respectively results in four ideal types presented in Table 1 and mapped in Figure 2: (1)

Non-Pressured, (2) Emissions-Pressured, (3) Trade-Pressured, and (4) Doubly-Pressured. In what follows, I provide some stylized facts about the structure of economic production in each to validate differences between them and ground the intuition behind my claim that GIP generates electoral rewards in doubly-pressured communities due to differences in industrial and emissions composition (see Appendix A.1 for further details).

Figure 2: Pressure Status of U.S. Counties



Note: Counties are classified based on (1) aggregate total emissions and (2) imports per worker from the China Shock. Non-pressured counties are jointly below the median. Trade- and emissions-pressured counties are above the median on the given dimension respectively. Doubly-pressured counties are jointly above the median on both dimensions.

Communities facing little historical trade exposure and with few emissions, or *non-pressured* communities, are dominated by wholesale trade (18.5% of employment), education and health (10.5%) and hospitality services (10.2%); what industrial production there is, is relatively clean. These communities are typically more suburban and rural, for example, parts of the Florida Panhandle and the Great Plains. Increasing emissions, but holding fixed historical trade exposure, results in communities deemed *emissions-pressured*. Large portions of Texas, Louisiana, Wyoming and Florida feature prominently among this group of communities either due to fossil fuel production or usage. Production in these emissions-pressured communities is roughly half of a standard deviation more emissions-intensive than in non-pressured communities, with roughly 5% of all employment in extractive industries. In both communities, manufacturing is low, less than 10% of employment.

Across the bottom row, communities differ from the top given their greater historical trade exposure; between them, local aggregate emissions is once again the source of variation. Manufacturing employment, in spite of high historical trade exposure, remains a substantial portion of the employment base in both *trade-pressured* (14.2%) and *doubly-pressured* (16.6%) communities. As an industry, manufacturing ranks as the second largest employment source behind wholesale trade, but ahead of education and health, hospitality and leisure, and business and professional services in both. Trade-pressured communities include areas of northeastern Arkansas and portions of Kentucky and Tennessee, whereas doubly-pressured communities feature prominently in the Rust Belt and the inland Carolinas region.

At the aggregate level, trade- and doubly-pressured communities are similar in terms of employment structure, yet the composition of industry, in particularly the type of manufacturing varies between them: trade-pressured communities feature a greater share of light, or less emissions-intensive industry, compared to doubly-pressured communities. Economic activity in doubly-pressured communities is a full standard deviation more emission-intensive than in Trade-Pressured communities. This equates to roughly an additional ounce of CO_2 per dollar of goods produced. Subsetting to just manufacturing returns a similar pattern, it is most emission-intensive in doubly-pressured communities and least in trade-pressured communities with the difference again being roughly 0.5 to a 1 ounce additional CO_2 per dollar.

To summarize, shifting vertically across the cells in Table 1 results in a reorganization of the local economy in broad strokes: an increased reliance on manufacturing. Shifting horizontally either leads to a greater share of extractive and fossil fuel employment in places with low trade exposure, or a shift from light to heavy manufacturing in places with high trade exposure. While cursory, this overview of employment and production according to exposure to globalization and decarbonization makes clear that investments are being made in substantially *different* local economic contexts. How do these varying contexts shape the benefits that GIP can provide?

GIP and its local benefits

By introducing novel capital expenditure into local communities, GIP may provide concentrated material and symbolic benefits. Policy feedback research emphasizes that these policy benefits need to be visible to voters and traceable to public actors (Mettler, 2011; Campbell, 2012; Hamel, 2025). Investment must be acted on—not merely announced—to influence voters. Visible investment must also provide relevant benefits: Simply put, as both a green *and* industrial policy, GIP provides more benefits to communities in need of assistance vis-à-vis the green transition and globalization than elsewhere.

Regarding globalization, GIP can reinvigorate industrial production and employment in areas that have shed manufacturing jobs in recent decades. That is, it can *compensate ex post* adjustment costs of globalization. In trade-exposed communities, it reintroduces employment and tax revenues, thereby improving public service provision and material conditions more broadly (Autor et al., 2025; Feler and Senses, 2017). Symbolically, the introduction of "clean" or "advanced" manufacturing can address grievance concerns stemming from manufacturing's diminished status (Bergquist et al., 2020; Broughton, 2014;

Ternullo, 2024). Absent historical import competition, GIP cannot compensate for globalization's material or symbolic consequences.

Regarding decarbonization, GIP differs from traditional modes of compensation, such as expanded unemployment or retraining (Gazmararian and Tingley, 2023; Bolet, Green and González-Eguino, 2024); targeting firms, its impact operates via an *insurance* mechanism. It reduces *ex ante* economic risk from adjustment costs related to decarbonization. Workers in emissions intensive employment remain in their jobs, rather than needing to seek out new employment, diminishing "jobs-killing" arguments (Vona, 2019). Investment's insuring role can likewise shore up identities threatened by the green transition (Gaikwad, Genovese and Tingley, 2022). In places with ample emissions, GIP can improve local economic resilience via this insurance channel; absent emissions it cannot provide such benefits.

In doubly-pressured communities compared to elsewhere, GIP provides both ex post compensation and ex ante insurance. The composition of local emissions and industrial employment shapes how GIP interacts with each community type's economic trajectory, determining if GIP is well suited to address local economic challenges. This explains why exposure to a single dimension is insufficient to generate electoral rewards.

In emissions-pressured communities, fossil fuels power the local economy, in contrast to doubly-pressured ones, where heavy industry drives pollution and employment. Clean investment's decarbonizing impact differs between them: For fossil fuels, it is a *substitute*, whereas for manufacturing it is a *complement*. For example, solar power reduces emissions from electricity used by a manufacturer, making the investment complementary to the manufacturer's decarbonization. This solar power replaces traditional fossil fuels in the energy supply; GIP investment is simultaneously a substitute and a complement depending on the industry. In emissions-pressured communities, GIP may alleviate the absolute reduction in jobs. Fossil fuel workers, nevertheless, still need to change sectors.

Furthermore, it does nothing to ease concerns about declining local status. Conversely, in doubly-pressured areas, these same investments preserve existing manufacturing jobs and reinforce rather than erode local identity.

In trade-pressured compared to doubly-pressured communities, light rather than heavy industry is a larger share of the local economy. Climate regulation poses lower adjustment costs given light industry's lower emission intensity. Moreover, light industry is more amenable to electrification; this diminishes further any insurance benefits from GIP in trade-pressured places. Trade concerns, then, tend to predominate, compared with doubly-pressured places, in which decarbonization is on more equal footing with globalization. For trade-pressured communities, tariffs may be a more attractive policy alternative: they focus directly on the core concern of job loss from imports without requiring voters accept the climate agenda inherent to GIP. The compensatory benefit of GIP likewise varies with industrial composition: Doubly-pressured communities with a stronger legacy of heavy industry—steel, chemicals, automotive—once sat at the frontier of manufacturing, with relatively high-skilled workforce compared to less-skilled light industry. GIP and the return of *contemporary* advanced manufacturing better compensates for this specific type of skilled manufacturing job loss.

This discussion suggests two hypotheses, one general and the other specific. In both cases, investment must be visible for these effects to occur; it cannot be simply promised. As a first cut, given the ex post compensation and ex ante insurance from GIP, I expect:

H1: GIP investment has a greater electoral effect in areas with globalization and decarbonization exposure compared to areas without them.

Given the compositional differences between the four economy types, GIP's compensatory and insurance mechanisms are precisely suited for places with abundant *manufacturing* emissions and trade exposure, suggesting that electoral effects should be concentrated in manufacturing doubly-pressured communities, rather than in high-emissions or trade-exposed communities writ large. Hence, I expect:

H1a: GIP investment wins the incumbent votes in areas with globalization and manufacturing decarbonization exposure but not elsewhere.

Data and Design

Passed in August 2022, the IRA represents the largest climate expenditure package in the U.S. to date. Subsidies, primarily via tax credits to business and consumers, incentivize technological innovations that reduce carbon emissions from industrial production, develop manufacturing facilities for green technologies or fund clean energy generation. In Appendix A, I provide additional details on the specific tax credits in the IRA and how they introduced novel or updated existing financing mechanisms for the green transition. Broadly, the tax credits nudged investments in clean energy production or manufacturing for clean technologies.

Whereas Democrats championed climate issues and stressed the reshoring of American manufacturing in the Harris campaign, the Trump campaign centered its attempts to address deindustrialization around tariffs as a means of correcting trade deficits and bringing back manufacturing employment, not just its green variant. Communities doubly-pressured by decarbonization and globalization, therefore, faced a policy cross-roads in the 2024 election. Economic revitalization might take place via subsidized decarbonization and green manufacturing, as presented by the Democrats, or via greater economic autarky and punitive tariffs, as presented by the Republicans. In either case, state intervention to shape manufacturing employment was prominent for both parties: what varied was the policy instrument between them. Absent green investment's impact, voters, especially those having faced trade exposure, may have found the Trumpian economic appeal enticing.[11]

To assess the electoral impact of GIP, I utilize county-level data on investment, imports, emissions, and presidential voting in a difference-in-differences framework from 2000 to 2024. Vote share data are a combination of historical records from the MIT Election Lab and my own collection for the 2024 election. Controls for matching and propensity score weighting come from the 2000 U.S. Census. I use the original import shock measure from Autor, Dorn and Hanson (2013) to capture historical trade exposure between 2000 and 2008.[12] Given the theoretical focus on past deindustrialization, I use the 2000-2008 measure as my covariate of choice to capture globalization exposure.

Emissions data to measure decarbonization exposure come from the EPA's FLIGHT database. These data are recorded at the production site level (e.g., a steel or power plant) and provide yearly estimates of CO_2 emissions as well as production site industry codes. To generate county-level measures of exposure, I sum individual production site emissions across all industry codes as a first cut. To assess whether voting behavior differs based on manufacturing versus fossil fuel emissions, I construct a second measure that only sums emissions from manufacturing production sites. I use emissions data for 2012 as it is clearly pre-treatment and prior years use a differing measurement strategy.[13]

To classify counties by their exposure to globalization and decarbonization, I quartile counties by their import exposure and aggregate production site emissions. *Doubly-Pressured* status is an indicator taking a value of 1 if a given county is jointly above the median on each dimension. I define a general *Doubly-Pressured* indicator that captures all emissions, as well as an analogous manufacturing *Doubly-Pressured* indicator. Emis-

[11] I address the differential appeal of tariffs in Figure 6.

[12] In Table A3, I demonstrate the absence of continued manufacturing job loss between 2012 and 2024: Doubly-pressured and trade-pressured counties lost 0.3 and 0.2 manufacturing jobs as a percentage of the total workforce.

[13] In Appendix Figure A2, I show that 2012 data strongly correlate with 2019 data, the year prior to the Biden administration.

sions(Trade)-pressured counties have above median emissions (import) exposure, but below median emissions (import) exposure. Non-Pressured counties are those with jointly below median exposure. In total, 807 counties are classified as *Doubly-Pressured*, with 43% (N = 345) receiving an investment signal (i.e., at minimum announced).[14]

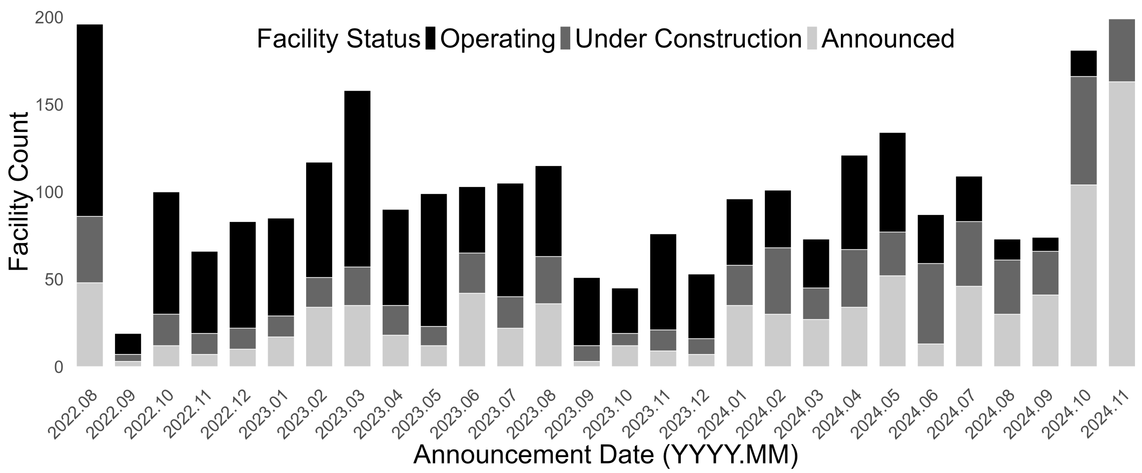
Green investment data comes from Rhodium Group's Clean Investment Monitor. It provides estimates of capital expenditure for investments eligible under the IRA. I utilize data through the fourth quarter of 2024. This gives the closest picture of investment development with respect to the November election. Investments are broadly categorized into three groups: (1) Manufacturing, (2) Energy and Industry, and (3) Retail. Geo-located data are available for these first two categories. Manufacturing investment refers to any investment made to facilitate the production of greenhouse gas reducing technologies. Energy and Industry investments are those which decarbonize existing production sites or build out clean energy sources. Investments are coded by status—either announced, under construction, or operational—as of the end of 2024.

A central challenge to assessing the impact of the IRA is selection into investment. Firm decision-making is derivative of many local factors, not just national-level policy incentives, hence to understand any causal effects of investment on voting behavior, mitigating selection bias is essential. To address potential selection bias, I focus on counties in which some investment signal has taken place, meaning that investment must be at minimum announced. Given that certain counties may be more amenable to green investment than others, this minimal display of commercial intent and risk acceptance lets me account for underlying local characteristics that differ across the U.S. In Figure 3, I plot the monthly distribution of investments between August 2022 and November 2024. Investments announced in a given month are then shaded based on their status as either still announced,

[14] For the remaining cells in Table 1, there are 806 non-pressured counties and 772 trade- and emissions-pressured counties respectively.

under construction, or operational in November 2024. While there is a trend in terms of earlier investments being more likely to be completed, timing is not deterministic of investment status.

Figure 3: Monthly Facility Announcements by Status (2022-2024)

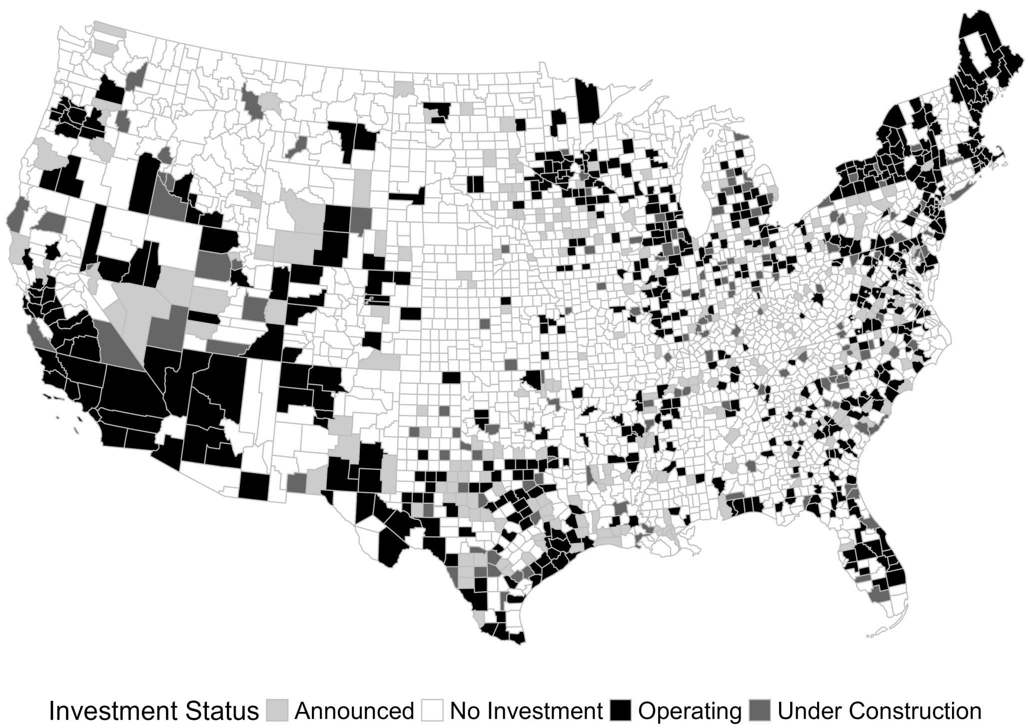


Note: Bars denote the monthly total of announced investments. Shading denotes the status of a given investment in November 2024.

This variation in investment status motivates my measurement of policy impact, or treatment. Counties with *only* announced investment as of November 2024 serve as my control group, whereas counties with either under construction or operational investment are treated. Figure 4 visualizes the sample by investment status. I generate a time-varying binary measure of visible investment taking a value of 1 if *any* investments became operational or began construction after the IRA was announced in a given county. In total, roughly one-third of the country received some type of investment signal (N = 993): this is the sample for main analysis. In terms of treated counties, there are 262 and 492 for Doubly-Pressured and all other counties respectively. In control, that is those receiving only announced investment, there are 83 and 156 counties respectively. Given that some counties receive several investments, this binary treatment definition is a conservative one:

a single investment that is beyond the announced stage means a county is treated. This aggregates more weakly impacted counties with those having more investment, biasing results against my theoretical expectations. In Appendix B, I demonstrate the balance improvements this treatment definition and sampling strategy provide compared to designs using the entire country; estimations using the entire country and failing to account for selection, moreover, demonstrate significant pre-trend divergences (see Table B3).

Figure 4: County Status as of November 2024



Note: Counties with any shading are included in the sample. Appendix B presents results with a full country sample.

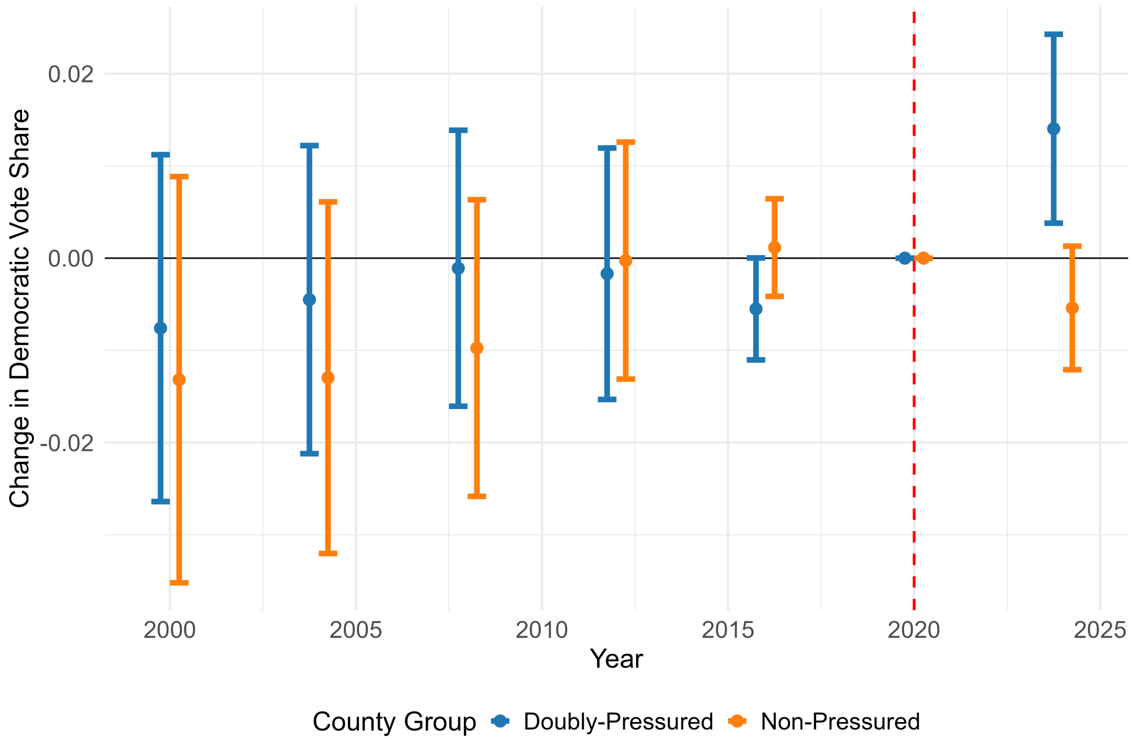
To better account for any remaining selection bias between counties that might shape investment status, I utilize inverse propensity score weighting to ensure comparisons across counties are balanced in my estimation.[15] Using 2000 Census data, I estimate propensity scores for investment treatment status using the following variables: percent male, percent Hispanic, percent white, median income (logged), percent of households under the poverty line, unemployment rate, labor force rate, and age. In Appendix B, I demonstrate that the covariate-balanced propensity scores generate a virtually identical sample and provide sample statistics. I include the inverse of these propensity scores as weights to estimate the impact of investment and doubly-pressured status on Democratic two-party vote share in the following difference-in-differences specification:

$$\text{DVS}_{it} = \lambda_t + \alpha_i + \beta_1 \text{Investment}_{it} + \beta_2 \text{Investment}_{it} \times \text{Doubly-Pressured}_i + \epsilon_{it} \quad (1)$$

Where λ_t and α_i are election-year and county fixed effects and *Investment* and *Doubly-Pressured* are indicators for treatment and exposure status respectively. I omit the marginal effect of *Doubly-Pressured* as it is collinear with the unit fixed effects. Standard errors are clustered at the commuting zone following Autor, Dorn and Hanson (2013). Causal identification in a difference-in-differences framework requires we find plausible that absent investment, the trends in voting behavior between counties would have retained similar trajectories. I probe for violations of the parallel trends assumption with placebo and equivalence tests: Figure 5 presents the results of an event study analysis to assess for violations of this assumption. All point estimates between 2000 and 2016 for both doubly-pressured and the remaining counties are indistinguishable from zero. As a further probe, I utilize equivalence tests as proposed by Hartman and Hidalgo (2018), all point estimates fall well within the joint equivalence range meaning there is no evidence of an imbalance

[15] In Appendix B, I discuss the empirical strategy compared to a matching strategy using the entire country. Table B6 presents results of the latter analysis which mirror the results presented below.

Figure 5: Pre-Trends and Event Study Estimate



Note: See Table B1 for full regression results. Bars denote 95% confidence intervals.

in pre-trends between the two sets of counties.

By trimming the sample and using inverse propensity score weights, the identification strategy better ensures that counties under comparison are similar on observable factors. Put differently, there would need to be some alternative time-varying characteristics driving any observed shift in voting behavior in counties receiving investment, or investment and *Doubly-Pressured* status, despite these similarities. Under these assumptions, β_1 identifies the causal effect of investment in non-pressured counties, whereas β_2 identifies the additional change in voting behavior in doubly-pressured counties compared to non-pressured counties. Evidence in favor of my argument would take the form of a positive value on the

Table 2: Climate Investment, Doubly-Pressured Status and Electoral Behavior

	Democratic Vote Share				
	Model 1	Model 2	Model 3	Model 4	Model 5
Investment	0.01	-0.00	0.03^{*}	0.00	0.00
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Investment × Doubly-Pressured				0.02^{*}	
				(0.01)	
Investment × Manufacturing Doubly-Pressured					0.02^{*}
					(0.01)
Investment × FF Doubly-Pressured					-0.00
					(0.01)
County Types?	All	Non-DP	DP	All	All
Estimate	ATE	Marginal	Marginal	CATE	CATE
N	6948	4533	2415	6948	6948
Counties	993	648	345	993	993
R^2	0.89	0.90	0.87	0.90	0.90
Adj. R^2	0.88	0.89	0.85	0.88	0.88

Notes: The outcome variable is the two party Democratic vote share. All models include county and year fixed effects with electoral data from 2000 and 2024. Robust standard errors clustered at the commuting zone. $^{***}p < 0.001$; $^{**}p < 0.01$; $^{*}p < 0.05$; $^{\dagger}p < 0.1$

interactive β_2 coefficient, meaning that visible investment in Doubly-Pressured counties results in greater incumbent, that is Democratic, vote shares than elsewhere.

National Results

Table 2 presents results testing the effect of clean investment on Democratic two party vote share. I start by presenting more aggregated specifications before moving to subgroup marginal and conditional specifications, which I then complement with visualizations. The aggregate model demonstrates that, on average, GIP had no effect; the remaining subgroup and conditional models make clear that (1) visible investment from GIP won votes in doubly-pressured counties, and (2) that this electoral gain was larger than elsewhere. These effects, typically between 2 to 3 percentage points, are limited to doubly-pressured communities with substantial manufacturing emissions.

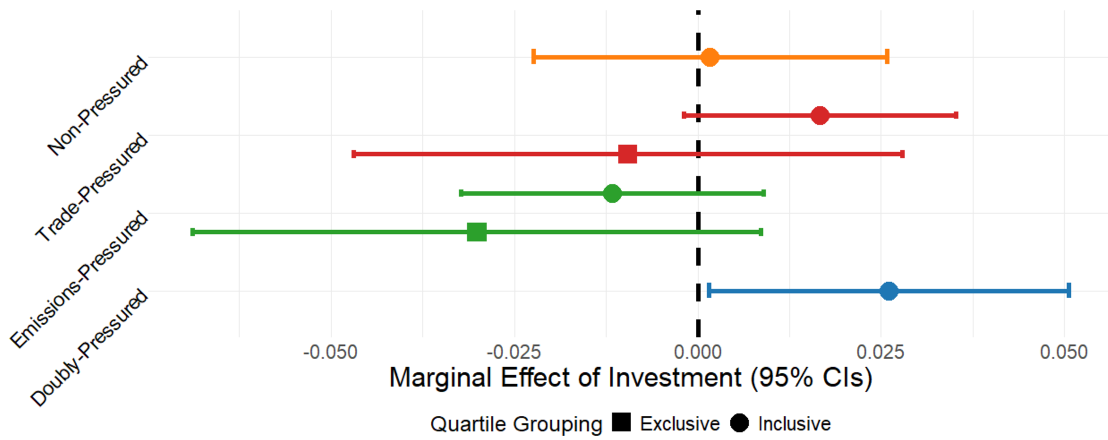
Model 1 considers all counties in the sample (N = 993); it captures the average effect of visible investment compared to announcement. In aggregate, there is a small shift towards the Democrats, but it is not distinguishable from zero. Using different modeling and sampling strategies results in a similar null average effect of investment, in line with existing studies (Miao, Finnegan and Andersson, 2026). Models 2 and 3 present subgroup marginal effects of investment in non-doubly-pressured and doubly-pressured counties respectively. In counties with limited deindustrialization risk, investment has no electoral effect. By contrast, Democrats won an additional 3 p.p. in doubly-pressured counties following investment. With roughly two-thirds of the 345 doubly-pressured counties being treated, this equates to nearly 8% of the country rewarding investment. Models 4 and 5 present the conditional specifications, including the entire sample, with treatment interacted with the *Doubly-Pressured* indicator. Electoral rewards from GIP are limited to doubly-pressured counties, in particular those with ample *manufacturing* rather than *fossil fuel* emissions—consistent with the argument above.[16]

Given that Non-Pressured, Trade-Pressured, and Emissions-Pressured communities differ significantly in their underlying industrial composition and emissions profiles, Figure 6 splits the analysis by county type and presents marginal effects for each, that is the effect of investment on voting behavior within each community type. For the sets of counties with exposure on one dimension, I present two sets of results: (1) *Inclusive* groupings which include all counties above the median on that dimension, but below the median on the other and (2) *Exclusive* groupings which include counties in the fourth quartile in

[16] In Appendix A, I utilize the Energy Community designation, a tax credit bonus to communities with historical fossil fuel employment or production and current above-average unemployment as an alternative to the *Doubly-Pressured* Fossil Fuel indicator in Model 5. I find that investment led to a shift towards the Republicans in these Energy Communities, in spite of funding multipliers; doubly-pressured communities based on manufacturing emissions continue to shift towards the Democrats in this alternative specification (2 p.p.). This backlash is consistent with work that documents a slight shift (0.3 p.p.) towards the Republicans from Energy Community designation (Li, 2025). By making clear that fossil fuels are being replaced, investment may trigger further backlash in these emissions-pressured communities rather than provide insurance benefits.

one dimension, but the first in the other. The former allows for an analogous cut-off as the Doubly-Pressured category and better ensures a sufficient number of observations to estimate marginal effects. The Exclusive grouping restricts the comparison to only those counties that are highly pressured as an alternative probe of the necessity of *both* dimensions for electoral effects. If exposure increased linearly on each dimension of economic risk independently, then these counties would be the most likely to respond electorally.

Figure 6: Marginal Effect of Investment by Community Type



Note: Point estimates denote the effect of investment on Democratic two-party vote share from subgroup regressions for each of the respective cells in Table 1. Inclusive estimates include all counties that fall either above or below the median on each dimension. Exclusive estimates include only counties in the fourth and first quartile on each dimension. Doubly-pressured status measured using manufacturing emissions, not aggregate total emissions. Table B2 presents full regression results.

Figure 6 provides evidence consistent with the necessity of both emissions and trade exposure to generate electoral benefits from GIP. Splitting the sample into four inclusive groups provides no evidence of exposure on one dimension leading to an electoral response to clean investment; a more restrictive coding, focusing on just those counties with high exposure on one dimension, returns similar results. Outside the industrial heartland, or those places doubly-pressured by trade and climate mitigation, visible investment had little impact. By contrast, where it could insure current employment *and* reintroduce "advanced" manufacturing jobs thereby compensating for past job loss, it won votes for the Democrats.

Robustness

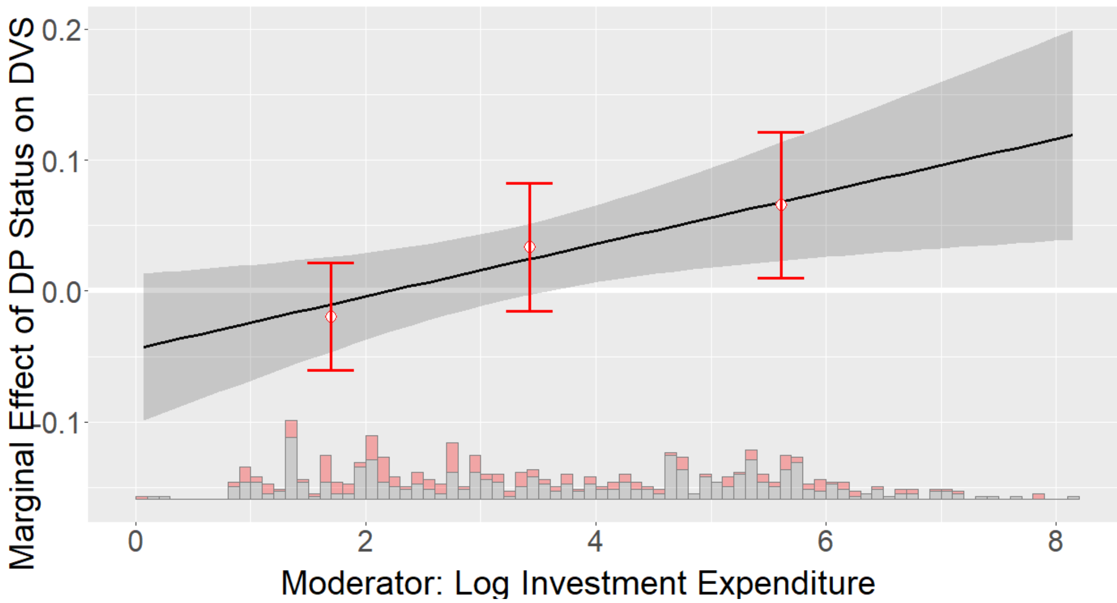
In this section, I briefly discuss the robustness of the national-level results before considering two extensions as well as mechanisms. I focus on three sets of empirical concerns: (1) related to selection and therefore identification, (2) in terms of measurement of *Doubly-Pressured* status and treatment, and (3) with respect to other sources of confounding. Across these different robustness exercises, the core result of a positive shift towards the Democrats in doubly-pressured counties remains; these additional analyses, moreover, do not return consistent evidence of electoral rewards following investment elsewhere.

Selective Investment and Threats to Identification: Thus far I have focused on counties which received at minimum an announced investment. Two concerns, however, might arise from this sampling choice: (1) counties receiving announcements which did not progress may have backlashed against stalled development, and (2) Democrats could have targeted or prodded investments along in places where it would have been electorally beneficial. To assess the first, I treat announcement as treatment and no investment as control: there is no evidence of backlash to potentially stalled investment (see Table B4). I address the second by checking for discontinuities in the cumulative distribution of investment based on the 2020 Democratic vote. The absence of any sharp increases for either announced or visible investment suggests, in line with existing research on the implementation of the IRA (Jones and Peck, 2026), that the White House was not targeting investment towards electorally rewarding counties (see Figures B2 & B3). National-level Democrats do not appear to have had much say in where and how quickly investment took place. More generally, the results are likewise robust to a matched sample using the entire country or a sample that uses all counties in the continental U.S. (see Tables B6 & B7 respectively).

Alternative Measures of Doubly-Pressured and Treatment: To connect the empirical analysis to the 2 $\times$ 2 in Table 1, I classified counties into four groups, with above median exposure on both dimensions making a county *Doubly-Pressured*. In Table B8, I operationalize *Doubly-Pressured* status in a more disaggregated fashion by summing the quartiled exposure along both dimensions and then considering investment's impact at each discrete level (i.e., 2-8). I find similar incumbent rewards, albeit noisier ones as disaggregation reduces power. With respect to treatment, I consider two measures along the intensive margin given that the binary measure combines counties with varying stages of investment: (1) the total amount of capital expenditure and (2) the proportion of operating and under construction investment (see Tables B9 and B10 respectively). Larger investments and a greater share of investment being visible leads to larger Democratic electoral gains. Substantively, a one standard deviation increase in logged expenditure or the proportion of operational or under construction investment increases Democratic vote share by roughly 1%. Figure 7 visualizes the marginal effect of *Doubly-Pressured* status across the range of capital expenditure.

Addressing Confounding with Alternative Specifications: To better account for local economic or political trends, I leverage two sets of time-varying fixed effects batteries: (1) commuting-zone-by-year, and (2) state-by-year. If one finds plausible that commuting zones share many similar economic challenges, then the former battery further increases confidence in the results as any semi-local time-varying confounders are absorbed. For instance, this battery partials out the semi-local election year average in unobserved confounders such as unionization rates, education, or other demographic characteristics. Given that many states layered additional policies on top of the IRA, a point I address in further detail below, the results could be driven by states with these additional incentives. Includ-

Figure 7: Marginal Effect of Doubly-Pressured at Varying Capital Expenditure Levels



Note: Points represent marginal effect estimates at different terciles of the capital expenditure distribution using the `interflex` package (Hainmueller, Mummolo and Xu, 2019).

ing state by year intercepts forces comparisons between counties with the same legislative context. The findings are robust to these local time-varying controls. Finally, to assure that the weights are not driving the results, Table B13 reruns Table 2 excluding the inverse propensity score weights; results remain substantively similar, but with inflated estimates.

Extensions: Individual Survey Data and French Data

The results presented thus far provide consistent evidence of GIP winning votes in Doubly-Pressured counties in the U.S. Before considering evidence of the mechanisms, I briefly extend the results in two directions. First, I utilize individual panel survey data from the Cooperative Election Survey between 2020 and 2024 to test my argument at the individual level. This probes the argument's internal validity by assessing whether aggregate county-level findings likewise take place among individuals. By controlling demographic characteristics, it directly addresses by other means local confounding concerns noted above. Second, I consider whether the results hold in a second case, France, using green aid data and incumbent voting over the past two electoral cycles. Given that the consequences of globalization, namely the China shock, as well as the potential adjustments costs of climate mitigation are similar across most post-industrial economies, these data test the generalizability of my argument. In Appendix B.4, I provide further details on the data generating processes for both designs.

In Table B14 I consider whether investment in Doubly-Pressured counties had a differential impact on individual preferences and voting behavior. Models 1 and 2 consider approval of the IRA and President Biden respectively, whereas the final two models consider voting behavior. Moving from announcement to visible implementation of the IRA uniformly increases support for the policy, by roughly 4 p.p. in all counties. This increased support for the IRA, does not, however, translate to increased approval of President Biden, consistent with existing work which suggests that the former President received less credit than other political actors for investment (Gazmararian, Jensen and Tingley, 2026). Nevertheless, in line with the above results, individuals in Doubly-Pressured communities were more likely to switch their vote to the Democrats following investment compared to their peers elsewhere in the U.S. (with differences significant at $p < 0.1$). What might explain this divergence in approval and behavior? While individuals may have been less likely to credit and therefore increase their approval of Biden, the clear partisan divide over GIP, a point I develop in greater detail below, suggests a vote for the Democrats would better ensure continued investment, something of particular value to individuals in Doubly-Pressured communities. Concerns about the viability of in-progress investment may have led these voters to adopt a more prospective approach at the ballot box.

Table 3: CES 2020-2024 Panel Results

	IRA Approval	Biden Approval	Vote Democratic	Vote Republican
Investment	0.04^{***}	-0.01	-0.00	0.01
	(0.02)	(0.02)	(0.01)	(0.01)
Investment	-0.00	-0.01	$0.03^{\dagger}$	-0.02
× Doubly-Pressured	(0.03)	(0.02)	(0.02)	(0.02)
N	10818	10818	8520	8520
Clusters	5415	5415	5262	5262
R^2	0.86	0.94	0.97	0.97
Adj. R^2	0.72	0.88	0.93	0.91

All models include respondent and state-by-year fixed effects. Models 1 and 2 include the 2022 and 2024 CES waves. Models 3 and 4 include the 2020 and 2024 waves. Robust standard errors clustered at the respondent. $^{***}p < 0.001$, $^{**}p < 0.01$; $^{*}p < 0.05$; $^{\dagger}p < 0.1$

U.S. manufacturing did not suffer the consequences of the China Shock alone (Colantone and Stanig, 2018), nor are emission intensive communities absent from other post-industrial societies. Given the focus on how GIP generates electoral rewards by addressing structural concerns related to trade and climate regulation, my argument should generalize beyond the U.S. Table 4 presents results of an analogous regression to above in France. Investment is a binary indicator for any climate ministry investment, whereas logged expenditure captures the intensive margin of investment. To keep the analysis comparable, I calculate two-party vote shares for the incumbent Emmanuel Macron as well as the far-right Front National, the most comparable party to the U.S. Republicans. In France, climate investment to doubly-pressured communities results in incumbent electoral gains at the expense of right-wing competitors.

Mechanisms: Evidence from Michigan

Taken together, the results thus far present consistent evidence of GIP-spurred investment winning incumbents votes in areas with adjustment costs to both globalization and the green transition. These incumbent effects are, moreover, driven by manufacturing rather

Table 4: Investment, Doubly-Pressured Status and French Presidential Voting

	Macron Two Party Vote	
	Model 1	Model 2
Investment	-0.00	
	(0.01)	
Investment × Doubly-Pressured	0.04^{**}	
	(0.01)	
Expenditure (log)		-0.00
		(0.00)
Expenditure (log) × Doubly-Pressured		0.00^{**}
		(0.00)
N	1070	1070
R^2	0.99	0.99
Adj. R^2	0.97	0.97

The outcome variable is the two-party vote share between the party of Macron and the far-right Front National. Investment is a binary indicator for any ADEME ministry investment, whereas Expenditure is the logged total of this investment. Robust standard errors clustered at the electoral district. $^{***}p < 0.001$, $^{**}p < 0.01$; $^{*}p < 0.05$; $^{\dagger}p < 0.1$

than fossil fuel emissions. In this section, I probe mechanisms related to material and immaterial benefits that can come to communities following investment. I assess the presence of these mechanisms with data on local news coverage, efforts by local business development groups, and a panel of precinct voting returns.[17]

These analyses serve several functions to further test my argument. First, given that GIP-spurred business investments are a less-direct, and therefore less-visible, form of state intervention, it is an empirical question whether individuals are aware of investments taking place; investment visibility is a necessary condition for electoral consequences. In this way, I utilize the local media coverage as a hoop test for my argument: if investments are

[17]By utilizing local news coverage, I am not arguing that media coverage is the mechanism by which voters are made aware of these developments. It is one possible channel by which investments might become visible, however there are reasons to suspect that it is not the only one. First, as a I note below local news covers planning meetings involving community members, meaning investments are visible prior to coverage for some of the community. Second, if investments are more relevant to the local community (e.g., in doubly-pressured communities as argued above), then local media coverage may not be introducing new information but reflecting prevailing interests.

never covered locally, investments may not be sufficiently visible (Collier, 2011). Second, if visible, the analysis provides information on local communities' awareness of benefits, material or not, that they stand to receive. Finally, it allows me to check whether doubly-pressured communities portray themselves differently than elsewhere in the country, given the adjustment costs related to globalization and decarbonization, and therefore if they stand to see a relative improvement in status following investment.

I conduct these analyses in Michigan for several design-based and substantive reasons. Considering design, Michigan has several desirable characteristics. First, the combination of ample investment (40) and a large number of counties (83) ensures there is sufficient variation. Furthermore, similarly sized counties suggests local media has similar reach, coverage, and distribution networks. Finally, there was no gubernatorial election in 2024, meaning that year's election was focused on national political offices. Given that governors enjoy greater responsibility attribution for the IRA (Gazmararian, Jensen and Tingley, 2026), this ballot could not be split between Kamala Harris and governor Gretchen Whitmer.

Substantively, Michigan has a long-standing history of energy-intensive, heavy industry, most clearly with the automobile industry. Much has been written on the decline of Michigan manufacturing, and it is a quintessential example of the American Rust Belt. Furthermore, most of its energy comes from fossil resources,[18] meaning that even if industry is electrified there are still adjustment costs embedded within the supply chain (Cory, Lerner and Osgood, 2021). Michigan is, then, representative of an economy with substantial industrial heritage, but also significant risk of further economic erosion absent decarbonization assistance. As robustness, I also collected media data from two additional states that vary politically and/or economically from Michigan: Indiana and Wyoming.

[18] Natural gas and coal are the two largest energy vectors in the electricity supply; see https://www.grid-info.com/michigan.

Both are more conservative than Michigan, but Wyoming's economy is driven by fossil fuels and extractive industries, whereas Indiana also has substantial manufacturing. I first contextualize the results by briefly reviewing state-level policies that Michigan layered on top of the IRA. I then present evidence related to news coverage before using these findings, in particular related to varying benefits within counties to motivate the precinct analysis. I expand on this news coverage in Appendix C.

Local Communication and Perspectives

Since 2022, Michigan has been a primary beneficiary of IRA investment, with manufacturing and energy investments contributing equally to this total. This larger flow of capital expenditure is at least partially due to state-level investment schemes complimenting the IRA in an attempt to "capture federal dollars" and to "help Michigan communities that have seen manufacturing jobs disappear and re-create the prosperity they once enjoyed."[19] This synergy between state and federal incentives charged the debate surrounding clean investment in the lead up to the 2024 election, with Democratic politicians embracing the tax incentive approach championed by their party leaders.[20] Local Republicans, while not against investment, solidified their position around an "all of the above" energy strategy, one that limits government efforts to pick winners and losers.[21] Alongside this political divide on investment, state-level media coverage clearly linked a Democratic White House with continued investment, in contrast to a Republican one.[22] Michigan voters, then, were

[19] Hendricksen, Clara. February 24, 2024. "Whitmer seeks clean energy companies." *Battle Creek Enquirer*. Accessed July 10, 2025.

[20] See for example, 6th Representative Debbie Dingell's climate position: https://debbiedingell.house.gov/issues/issue/?IssueID=16223.

[21] See, for example, the similar positions of 4th district representative Bill Huizenga or 5th district representative Tim Walberg on energy respectively: https://huizenga.house.gov/issues/issue/?IssueID=23825 and https://walberg.house.gov/issues/energy-gas-prices.

[22] House, Kelly. October 14, 2024. "Michigan a top winner of climate funds Trump wants to revoke." *Bridge Michigan*. https://bridgemi.com/michigan-environment-watch/michigan-top-winner-climate-funds-trump-wants-revoke/. Accessed July 15, 2025.

arguably aware of the future implications for investment of either administration.

To assess the visibility of these investments, I relied on a list of media outlets from the Local Newspaper Initiative,[23] focusing on the three counties among doubly- and non-pressured counties respectively that had the most investment. These six counties account for 56% of all investments. Table C2 provides disaggregated details on specific investment coverage, I discuss general trends in what follows.

Across the six counties, local news coverage of investment was higher in doubly-pressured counties compared to non-pressured ones (78% to 43%). Local coverage highlighted myriad material benefits these investments provided to communities, for example temporary construction and permanent employment estimates and local tax revenues, especially from clean energy generation, that would fund local schools, urgent care centers, and infrastructure. These tax revenues, in addition to direct payments to landowners to lease land for energy generation, were often specific to the towns or cities that received the investment, suggesting alongside broader employment gains, material benefits are extremely concentrated from investment. Coverage likewise noted opportunities for local engagement and feedback in the case of announced investments. Consistent with investment improving the resilience of the local economy, one development combined a solar plant with a bio-digester to produce natural gas from existing agro-industrial waste, thereby preventing a dairy farm from going out of business.[24]

In Indiana and Wyoming, I observe similar dynamics: 80% of doubly-pressured counties covered investments whereas only 25% of non-pressured counties did (see Table C3). The benefits of local investment in economically depressed doubly-pressured counties, such as Jay County, Indiana, are clear: for example, in an editorial written by a local county

[23]For more information, see https://localnewsinitiative.northwestern.edu/.

[24]Steele, Greyson. June 6, 2024. Groundbreaking Ceremony: Consumers Energy breaks ground on new AgriEnergy center near Battle Creek. *Battle Creek Enquirer.* Accessed July 10, 2025.

councilor during the debates over the Big Beautiful Bill, following 2024 election. The local politician argued that "even though the Inflation Reduction Act of 2022 was far from perfect, it provided significant tax credits that have spurred billions in clean energy investment...including right here in Jay County, Indiana. Clean energy has become a lifeline for local governments. Revenue from wind and solar projects is one of the only sustainable ways we have to fund essential services like roads and public safety without relying solely on grants."[25] These data suggest that investments and their benefits are visible in doubly-pressured counties.

These investments coincide with ample public-private efforts, typically via business development organizations, to economically revitalize areas of Michigan that have seen reduced manufacturing employment and subsequent economic hardship. In places such as Calhoun and Montcalm counties that experienced some of the highest levels of import competition, attracting investment and overcoming perceptions of economic decay is paramount.[26,27] In doubly-pressured counties, manufacturing was and is the "backbone" of the local economy. As one business development organization in Jackson County, simply put it: "Manufacturing is definitely the key industry here, right. It's one of those key drivers that makes Jackson County who we are. It defines not only where we've come from as a community, but it's also going to play a large role in where we are heading in the future as well."[28] Investments, then, via "the recent wave of federal programs to support infrastructure, re-shoring manufacturing, and job creation present a unique opportunity for economies, like Greater Grand Rapids [Montcalm County], with a strong manufactur-

[25] Alexander, Bryan. 19 June 2025. "Keep renewable energy momentum." *The Commercial Review*. https://www.thecr.com/news/2025/jun/18/keep-renewable-energy-momentum/.

[26] "America's Dying Cities". February 9, 2011. *Newsweek*. https://www.newsweek.com/americas-dying-cities-66873. Accessed August 6, 2025.

[27] Renn, Aaron M. 2018. "Manufacturing a Comeback." *City Journal*. https://www.city-journal.org/article/manufacturing-a-comeback. Accessed July 15, 2025.

[28] Accelerate Jackson County. 2025. "EP#1 - A Focus on Manufacturing." https://acceleratejacksoncounty.org/ep1-a-focus-on-manufacturing/. Accessed July 9, 2025.

ing industry presence."[29] Alongside the material benefits of employment and tax revenue, these investments may placate the sense of industrial decay and decline of past decades in such doubly-pressured counties. In Montcalm County, as in other Doubly-Pressured counties, manufacturing defines the community and the introduction of "advanced" green manufacturing directly addresses these status concerns.

Together, the local communication and perspectives suggest that investment is visible, benefits are often hyper-local, and that doubly-pressured communities are acutely aware of not only the economic challenges they have faced, but also the opportunities embodied in a turn towards GIP. In the following section, I assess the generalizability of investment visibility and hyper-local benefits with precinct voting data.

Visible Investment, Concentrated Benefits, and Local Voting

If investment is visible, provides local status and carries material benefits, then it is plausible that any electoral consequences of investment will decay with distance. Neighboring towns that do not receive tax revenue increases and subsequently improved local service provision from investment, for example, may not increase their support for the incumbent. To test this claim, I require intra-county voting records; I utilize precinct voting records to generate such a dataset. Voting data comes from the Michigan Secretary of State, which I match to shapefiles from the Michigan Bureau of Elections (96% coverage rate). Given that precincts are intended to contain a similar number of registered voters, the number and shapes of precincts varies election to election. To recover a panel data structure, I generate weighted sum of intersections between grid cells and precinct boundaries to calculate the Democratic vote share in a given space. The primary assumption needed to recover a consistent panel is that the population distribution is uniform within each precinct, but

[29] The Right Place. 2022. "Strategic Plan 2023-2025. https://www.rightplace.org/about-us/strategic-plan. Accessed July 18, 2025.

may vary across precincts. Given that precincts adjust each election to cover a similar number of voters, this assumption is plausible. Appendix C provides more details on the data generating process.

Visibility is measured as the distance between an investment and a grid cell centroid. Recall that my primary sample of interest is counties that received some investment signal (i.e., at least an announcement). Given that I have location data for even announced investments, this distance measure is non-zero for all observations in the analysis below. I omit the small number of grid cells that have fewer than 100 total votes, as these likely reflect edge case intersections. As robustness, I include all counties in Table C1 and find similar results. In total, the sample includes 29 counties (35%) and roughly 800 grid cells over three presidential elections (2016-2024). Investment treatment and doubly-pressured status remain the same as above, meaning they are coded at the county level, hence in my preferred specifications, which include county-by-election-year fixed effects, I omit the marginal coefficients of these county-level variables as they are collinear with this local time-varying battery in the following equation:

$$\begin{aligned}\text{DVS}_{it} = \alpha_i + \lambda_t + \gamma_{ct} + \beta_1 \text{Investment}_{ct} \times \text{Distance}_i + \\ \beta_2 \text{Investment}_{ct} \times \text{Distance}_i \times \text{Doubly-Pressured}_c + \epsilon_{it}\end{aligned} \tag{2}$$

where i indexes grid cells, c counties, and t election years. By modeling grid-cell as well as county-by-election-year fixed effects, I account for any fixed characteristics of the voting area as well as common time-varying factors affecting the entire county. β_1 identifies the change in Democratic vote share with distance from investment in non-pressured counties, whereas β_2 identifies the differential or conditional change of distance from investment in doubly-pressured counties. Evidence consistent with hyper-local benefits from investment would consist of negative values on the β_2 coefficient. Potential confounders would need to co-vary with distance from investment *differentially* in doubly-pressured counties, but have no relationship with distance in non-pressured counties. In Figure C2 I find no evidence of parallel trends violations among doubly-pressured counties. I estimate Conley standard errors using a 180km cutoff.[30]

Table 5 presents the results. Column 1 contains the simplest specification, whereas Column 2 adds county-year fixed effects, before logging and binning distance by quartiles in Columns 3 and 4 respectively. Standardized coefficients for the triple interaction term in the final row demonstrate the similarity of point estimates across the various specifications. Column 1 replicates the national-level result in Michigan: the interaction between investment and *Doubly-Pressured* status is positive. In columns 2 through 4, there is consistent evidence of a spatial decay of this incumbent reward. Substantively, taking estimates from the binned regression, individuals living more than 21 miles from investment voted at lower rates for the Democrats. Any spatial variation in voting is only present in doubly-pressured counties, suggesting that local heterogeneity in electoral behavior is unlikely to account for the null results in the national analysis.

Conclusion

Understanding green industrial policy's electoral consequences requires considering how local context shapes the material and immaterial benefits accompanying implementation. These benefits are most likely in areas with ample exposure to globalization in the past *and* decarbonization in the future. In these doubly-pressured communities, GIP can simultaneously compensate ex post *and* insure ex ante due to compositional differences in local industry and emissions. Using a variety of data sources, I provide evidence of this

[30] I chose this cut-off given the largest distance within most Michigan counties (60km). Tripling this incorporates neighboring counties. Alternative cutoff measures do not consistently alter the results.

Table 5: Distance to Investment and Voting Behavior

	Democratic Vote Share			
	Model 1	Model 2	Model 3	Model 4
Investment	-0.00			
	(0.00)			
Investment × Doubly-Pressured	0.01^{***}			
	(0.00)			
Investment × Distance	0.00	0.00		
	(0.00)	(0.00)		
Investment × Distance × Doubly-Pressured	-0.00	-0.00^{***}		
	(0.00)	(0.00)		
Investment × Distance (log)			0.00	
			(0.00)	
Investment × Distance (log) × Doubly-Pressured			-0.01^{***}	
			(0.00)	
Investment × Distance Q2				-0.00
				(0.00)
Investment × Distance Q3				0.00
				(0.01)
Investment × Distance Q4				0.00
				(0.00)
Investment × Doubly-Pressured × Distance Q2				-0.00
				(0.00)
Investment × Doubly-Pressured × Distance Q3				-0.01^{*}
				(0.01)
Investment × Doubly-Pressured × Distance Q4				-0.01^{***}
				(0.00)
Standardized β	-0.02	-0.04	-0.04	
County-Year FE		✓	✓	✓
N	2482	2482	2482	2482
R^2	0.99	0.99	0.99	0.99
Adj. R^2	0.98	0.98	0.98	0.98

The outcome variable is the Democratic two-party vote share. The unit of analysis is the grid-cell year. All models include election-year and grid-cell fixed effects. The standardized β is for the interaction term on the triple difference to make comparisons easier between the various distance measures. Conley standard errors estimated with a distance cutoff of 180 km. $^{***}p < 0.01$; $^{**}p < 0.05$; $^{*}p < 0.1$

differential response to clean investment in the U.S.; Democrats won 2-3 p.p. at the ballot box in doubly-pressured communities, in particular those with substantial manufacturing emissions, following investment.

These findings suggest that rather than GIP compensating losers of the green transition, it is better conceptualized as compensation for manufacturing job loss from globalization. By contrast, regarding decarbonization, GIP is closer to an insurance device. Key to this conceptualization is a recognition of the distinction between fossil fuel and manufacturing emissions, as well as light and heavy industry. This compositional distinction reveals the limits of existing approaches confined to examining compensation schemes in fossil fuel country, while providing a theoretical basis for understanding where GIP will and will not generate electoral rewards. For fossil fuels, GIP *displaces* local industry and associated identities, making compensation challenging: it is simultaneously the harbinger of decline and said decline's solution. For manufacturing-based emissions, this is not necessarily the case.

Exposure to globalization and decarbonization are structural factors that can be further shaped by local institutions and organizations. For example, states such as Michigan have layered additional incentives on top of the IRA to attract further investment. While the incumbent reward in doubly-pressured communities is not dependent on this layering alone, it is an open question whether such policy layering can further foment pro-climate coalitions. Alongside institutional layering, ample research on the impacts of globalization in Rust Belt communities emphasizes how local organizations, for example labor or religious groups (Broughton, 2014; Ternullo, 2024), facilitate or hinder the transformation of political identities and partisan affiliation. In the present context, local business development groups are relevant actors seeking to attract investment, but it is an open question whether and how other local organizations interact with (green) industrial policies.

While this paper focused primarily on the United States over the past quarter century, the underlying economic threat of deindustrialization due to import competition and climate mitigation is common to many post-industrial societies. In light of these pressures, a common response by left-leaning governments has been to embrace interventionist policies such as GIP. As the far-right in many countries increasingly adopts anti-climate positions alongside its longer-standing immigration focus (Dickson and Hobolt, 2024), policies that facilitate clean investment and reduce the risk of further industrial job loss may mitigate such appeals. Green industrial policies, such as the IRA, are neither panaceas, nor invisible interventions—their electoral impact is shaped by the local composition of industry and emissions.

References

Acemoglu, Daron and Pascual Restrepo. 2020. "Robots and jobs: Evidence from US labor markets." *Journal of Political Economy* 128(6):2188–2244.

Allan, Bentley B. and Jonas Nahm. 2024. "Strategies of Green Industrial Policy: How States Position Firms in Global Supply Chains." *American Political Science Review* pp. 1–15.

Allan, Bentley, Joanna I Lewis and Thomas Oatley. 2021. "Green industrial policy and the global transformation of climate politics." *Global environmental politics* 21(4):1–19.

Ansolabehere, Stephen and David M. Konisky. 2014. *Cheap and Clean: How Americans think about energy in the age of global warming.* Cambridge, MA: MIT Press.

Autor, David, David Dorn, Gordon H. Hanson, Maggie R. Jones and Bradley Setzler. 2025. "Places versus People: The Ins and Outs of Labor Market Adjustment to Globalization." *NBER Working Paper Series* (33424).

Autor, David, David Dorn, Gordon Hanson and Kaveh Majlesi. 2020. "Importing Political Polarization? The Electoral Consequences of Rising Trade Exposure." *American Economic Review* 110(10):3139–3183.

Autor, David H, David Dorn and Gordon H Hanson. 2013. "The China syndrome: Local labor market effects of import competition in the United States." *American Economic Review* 103(6):2121–2168.

Baccini, Leonardo and Stephen Weymouth. 2021. "Gone for good: Deindustrialization, white voter backlash, and US presidential voting." *American Political Science Review* 115(2):550–567.

Ballard-Rosa, Cameron, Mashail Malik, Stephanie Rickard and Kenneth Scheve. 2021. "The economic origins of authoritarian values: Evidence from local trade shocks in the United Kingdom." *Comparative Political Studies* 54(13):2321–2353.

Bechtel, Michael M, Federica Genovese and Kenneth F Scheve. 2019. "Interests, norms and support for the provision of global public goods: the case of climate co-operation." *British Journal of Political Science* 49(4):1333–1355. Publisher: Cambridge University Press.

Bechtel, Michael M. and Kenneth F. Scheve. 2013. "Mass support for global climate agreements depends on institutional design." *Proceedings of the National Academy of Sciences* 110(34):13763–13768.

Bechtel, Michael M., Kenneth F. Scheve and Elisabeth van Lieshout. 2021. "Most people prefer constant carbon costs over increasing cost schedules even if costs are high." *Nature Climate Change* 11:909–10.

Beiser-McGrath, Liam F and Thomas Bernauer. 2024. "How do pocketbook and distributional concerns affect citizens preferences for carbon taxation?" *The Journal of Politics* 86(2):551–564.

Bergquist, Parrish, Stephen Ansolabehere, Sanya Carley and David Konisky. 2020. "Backyard voices: how sense of place shapes views of large-scale energy transmission infrastructure." *Energy Research & Social Science* 63:101396.

Besley, Timothy and Torsten Persson. 2023. "The Political Economics of Green Transitions." *The Quarterly Journal of Economics* 138(3):1863–1906.

Bez, Charlotte, Valentina Bosetti, Italo Colantone and Maurizio Zanardi. 2023. "Exposure to international trade lowers green voting and worsens environmental attitudes." *Nature Climate Change* 13:1131–1135.

Bisbee, James and B Peter Rosendorff. 2024. "Antiglobalization sentiment: Exposure and immobility." *American Journal of Political Science* .

Bolet, Diane, Fergus Green and Mikel González-Eguino. 2024. "How to get Coal Country to vote for Climate Policy: The Effect of a "Just Transition Agreement" on Spanish Election Results." *American Political Science Review* 118(3):1344–1359.

Breznitz, Dan and Jane Gingrich. 2025. "Industrial Policy Revisited." *Annual Review of Political Science* 28:329–350.

Broughton, Chad. 2014. *Boom, Bust, Exodus: the Rust Belt, the Maquilas, and a Tale of Two Cities*. Oxford: Oxford University Press.

Broz, J. Lawrence, Jeffry Frieden and Stephen Weymouth. 2021. "Populism in Place: The Economic Geography of the Globalization Backlash." *International Organization* 75(2):464–494.

Bush, Sarah Sunn and Amanda Clayton. 2023. "Facing change: Gender and climate change attitudes worldwide." *American Political Science Review* 117(2):591–608.

Campbell, Andrea Louise. 2012. "Policy makes mass politics." *Annual review of political science* 15(1):333–351.

Colantone, Italo and Piero Stanig. 2018. "The Trade Origins of Economic Nationalism: Import Competition and Voting Behavior in Western Europe." *American Journal of Political Science* 62(4):936–953.

Colgan, Jeff D., Jessica F. Green and Thomas N. Hale. 2021. "Asset Revaluation and the Existential Politics of Climate Change." *International Organization* 75(2):586–610.

Collier, David. 2011. "Understanding Process Tracing." *PS: Political Science and Politics* 44(4):823–30.

Cory, Jared, Michael Lerner and Iain Osgood. 2021. "Supply Chain Linkages and the Extended Carbon Coalition." *American Journal of Political Science* 65(1):69–87.

Dechezleprêtre, Antoine, Daniel Nachtigall and Frank Venmans. 2023. "The joint impact of the European Union emissions trading system on carbon emissions and economic performance." *Journal of Environmental Economics and Management* p. 102758.

Dickson, Zachary P and Sara B Hobolt. 2024. "Going against the grain: Climate change as a wedge issue for the radical right." *Comparative Political Studies* p. 00104140241271297.

Egan, Patrick J and Megan Mullin. 2017. "Climate change: US public opinion." *Annual Review of Political Science* 20:209–227.

Feigenbaum, James J. and Andrew B. Hall. 2015. "How Legislators Respond to Localized Economic Shocks: Evidence from Chinese Import Competition." *The Journal of Politics* 77(4):1012–1030.

Feler, Leo and Mine Z Senses. 2017. "Trade shocks and the provision of local public goods." *American Economic Journal: Economic Policy* 9(4):101–143.

Gaikwad, Nikhar, Federica Genovese and Dustin Tingley. 2022. "Creating Climate Coalitions: Mass Preferences for Compensating Vulnerability in the World's Two Largest Democracies." *American Political Science Review* 116(4):1165–83.

Gazmararian, Alexander F. 2025. "Sources of partisan change: Evidence from the shale gas shock in American coal country." *The Journal of Politics* 87(2):601–615.

Gazmararian, Alexander F. and Dustin Tingley. 2023. *Uncertain Futures: How to Unlock the Climate Impasse.* 1 ed. Cambridge University Press.

Gazmararian, Alexander F., Nathan M. Jensen and Dustin Tingley. 2026. "Why Biden-era clean energy investment policies had limited political returns." *Proceedings of the National Academy of Sciences* 123(9):1–8.

Genovese, Federica. 2019. "Sectors, pollution, and trade: How industrial interests shape domestic positions on global climate agreements." *International Studies Quarterly* 63(4):819–836.

Genovese, Federica and Endre Tvinnereim. 2019. "Who opposes climate regulation? Business preferences for the European emission trading scheme." *The Review of International Organizations* 14(3):511–542.

Gidron, Noam and Peter A. Hall. 2017. "The politics of social status: Economic and cultural roots of the populist right." *The British Journal of Sociology* 68:S57–S84.

Gidron, Noam and Peter A Hall. 2020. "Populism as a problem of social integration." *Comparative Political Studies* 53(7):1027–1059.

Hainmueller, Jens, Jonathan Mummolo and Yiqing Xu. 2019. "How much should we trust estimates from multiplicative interaction models? Simple tools to improve empirical practice." *Political Analysis* 27(2):163–192.

Hamel, Brian T. 2025. "Traceability and Mass Policy Feedback Effects." *American Political Science Review* 119(2):778–793.

Hartman, Erin and F Daniel Hidalgo. 2018. "An equivalence approach to balance and placebo tests." *American journal of political science* 62(4):1000–1013.

Heddesheimer, Vincent, Hanno Hilbig and Erik Voeten. 2025. "The Green Transition and Political Polarization Along Occupational Lines." *American Political Science Review* Forthcoming.

Hochschild, Arlie Russell. 2018. *Strangers in their own land: Anger and mourning on the American right*. The New Press.

Jensen, J Bradford, Dennis P Quinn and Stephen Weymouth. 2017. "Winners and losers in international trade: The effects on US presidential voting." *International Organization* 71(3):423–457.

Jones, Betony and Joe Peck. 2026. The Receipts: The Untold and Underappreciated Outcomes of Bidens Clean Energy Strategy. Technical report Roosevelt Institute. Available at: https://rooseveltinstitute.org/publications/the-receipts-the-untold-and-underappreciated-outcomes-of-bidens-clean-energy-strategy/.

Juhász, Réka, Nathan Lane, Emily Oehlsen and Verónica C. Pérez. 2025. "Measuring Industrial Policy: A Text-Based Approach." *NBER Working Paper Series* (33895).

Kim, Sung Eun and Krzysztof Pelc. 2026. "Geography of Grievance: Industrial Hubs Magnify Political Discontent." *International Organization* pp. 1–37.

Kupzok, Nils and Jonas Nahm. 2024. "The Decarbonization Bargain: How the Decarbonizable Sector Shapes Climate Politics." *Perspectives on Politics* 22(4).

Li, Zikai. 2025. "Unrequited Love: Estimating the Electoral Effect of a Place-based Green Subsidy with a 2D Regression Discontinuity Design." *Working Paper* . **DOI:** https://doi.org/10.31235/osf.io/s4nje_v2.

Longuet-Marx, Nicolas. 2024. Party lines or voter preferences? explaining political realignment. In *2024 APPAM Fall Research Conference*. APPAM.

McCright, Aaron M and Riley E Dunlap. 2011. "Cool dudes: The denial of climate change among conservative white males in the United States." *Global environmental change* 21(4):1163–1172.

McCright, Aaron M, Riley E Dunlap and Sandra T Marquart-Pyatt. 2016. "Political ideology and views about climate change in the European Union." *Environmental Politics* 25(2):338–358.

Meckling, Jonas. 2021. "Making Industrial Policy Work for Decarbonization." *Global Environmental Politics* 21(4):134–147. **DOI:** https://doi.org/10.1162/glep_a_00624.

Mettler, Suzanne. 2007. *Soldiers to citizens: The GI Bill and the making of the greatest generation*. New York: Oxford University Press.

Mettler, Suzanne. 2011. *The submerged state: How invisible government policies undermine American democracy*. Chiccago: University of Chicago Press.

Meyerrose, Anna M. and Sara Watson. In Press. "The Effect of Import Shocks, Electoral Institutions, and Radical Party Competition on Legislator Ideology: Evidence from France." *British Journal of Political Science* .

Miao, Fengcheng, Jared J. Finnegan and Julius J. Andersson. 2026. "Green Industrial Policy in the Voting Booth: The Electoral Effects of the Inflation Reduction Act." *Working Paper* . **DOI:** https://doi.org/10.33774/apsa-2026-98gg9.

Mutz, Diana C. 2021. "(Mis) attributing the causes of American job loss: The consequences of getting it wrong." *Public Opinion Quarterly* 85(1):101–122.

Pierson, Paul. 1993. "When effect becomes cause: Policy feedback and political change." *World politics* 45(4):595–628.

Polanyi, Karl. 1944. *The Great Transformation*. New York: Farrar & Rinehart.

Przeworski, Adam. 1996. "Public Support for Economic Reforms in Poland." *Comparative Political Studies* 29(5):520–543.

Rickard, Stephanie J. 2018. *Spending to Win: Political Institutions, Economic Geography, and Government Subsidies*. 1 ed. Cambridge University Press.

Ritchie, Hannah, Max Roser and Pablo Rosado. 2020. "CO_2 and Greenhouse Gas Emissions." *Our World in Data* . Available at https://ourworldindata.org/co2-and-greenhouse-gas-emissions.

Rodrik, D. 2014. "Green industrial policy." *Oxford Review of Economic Policy* 30(3):469–491.

Rodrik, Dani. 2021. "Why does globalization fuel populism? Economics, culture, and the rise of right-wing populism." *Annual Review of Economics* 13:133–170.

Ruggie, John G. 1982. "International regimes, transactions, and change: Embedded liberalism in the postwar economic order." *International Organization* 36(2):379–415.

Scheiring, Gábor, Manuel Serrano-Alarcón, Alexandru Moise, Courtney McNamara and David Stuckler. 2024. "The populist backlash against globalization: A meta-analysis of the causal evidence." *British Journal of Political Science* 54(3):892–916.

Scheve, Kenneth and Theo Serlin. 2023. "The German Trade Shock and the Rise of the Neo-Welfare State in Early Twentieth-Century Britain." *American Political Science Review* 117(2):557–574.

Stutzmann, Sophia. 2025. "Asymmetric backlash against structural economic change: The electoral consequences of the coal phase-out in Germany." *European Journal of Political Research* 64:1643–1667.

Ternullo, Stephanie. 2024. *How the Heartland went Red: Why local forces matter in an age of nationalized politics.* Princeton, NJ: Princeton University Press.

Thombs, Ryan P, Weimin Zhang and Benjamin K Sovacool. 2025. "Do industrial decarbonization policies deliver? A global assessment of policy effectiveness across 150 nations, 1990–2020." *Environmental Research Letters* 20(4):044014.

Voeten, Erik. 2025. "The energy transition and support for the radical right: Evidence from the Netherlands." *Comparative Political Studies* 58(2):394–428.

Vona, Francesco. 2019. "Job losses and political acceptability of climate policies: why the job-killingargument is so persistent and how to overturn it." *Climate Policy* 19(4):524–532.

Appendix

Table of Contents

A The Inflation Reduction Act

Passed on August 16, 2022, the Inflation Reduction Act (IRA) represents the largest climate expenditure bill to date in the United States. It is part and parcel of a wave of green industrial policies that have been introduced in many advanced economies in recent years in an effort to address economic competitiveness and spur green jobs. Politicians often frame these policies as a win-win: addressing both climate change and manufacturing competitiveness.[1] To facilitate increased climate investments on the part of firms, the bill amended and expanded parts of the tax code related related to energy production and advanced manufacturing.

These general categories are captured in the data by the Energy and Industry as well as Manufacturing categories. An example may help to clarify the difference between the two, consider solar panels: An investment made to produce solar photovoltaic cells, a key component in solar panels, in a given county is a manufacturing investment as it develops novel manufacturing capacity in the area. In contrast, capital expenditure to develop a solar panel field is an energy and industry investment as it is intended for decarbonized power generation. In one situation, the investment facilitates increased manufacturing

[1] See for example, former Vice President Kamala Harris' statement on the two anniversary of the Inflation Reduction Act, "Our Inflation Reduction Act is also the single largest climate investment in American history. While taking on the climate crisis and lowering utility bills for families, it is helping us to rebuild American manufacturing and drive American innovation creating good-paying union jobs, furthering economic opportunity, and contributing to the nearly $900 billion of private-sector investment since President Biden and I took office." 16 August 2024 https://bidenwhitehouse.archives.gov/briefing-room/statements-releases/2024/08/16/statement-from-vice-president-kamala-harris-on-the-inflation-reduction-act-anniversary/. Accessed 15 January 2025. Or see French President Emmanuel Macron's concluding remarks at the presentation of France's green industry bill, "We have overcome decades of deindustrialization and brought this period to an end. Now we must accelerate and go much further. The bill we will announce on Monday, as well as the entire strategy we will accelerate, both nationally and at the European level, is an acceleration of this reindustrialization, which is absolutely key. We need more work, more capital, more technical progress, with one goal in mind: to have a real response to climate change and biodiversity, more good jobs for our fellow citizens, and more independence for our nation in an uncertain geopolitical world." 11 May 2023. https://www.elysee.fr/emmanuel-macron/2023/05/11/accelerer-notre-reindustrialisation-le-president-presente-sa-strategie. Accessed 15 January 2025.

capacity, whereas the other replaces existing carbon-intensive production processes. The former example adheres to a situation in which GIP builds out novel industries, whereas the latter is closer to public assistance to facilitate the decarbonization of existing industry. Additional manufacturing industries eligible for tax credits include: wind, electric vehicles, batteries and electrolyzers among others. The energy and investment category includes innovations to traditional industry such as steel, paper and pulp, and cement alongside the development of sustainable aviation fuels, geothermal, hydrogen, and wind or solar farms among others. The retail category is excluded.

Alongside these general categories, the legislation introduced various "bonuses" or amplifiers to the tax incentives for local sourcing as well as wage and training requirements alongside location incentives. The primary implementation date for incentives was January 1, 2025 due to the expiration of existing tax code clauses at the end of 2024. Given the minimal changes in baseline incentives for energy tax credits, interim investments, that is those starting operation between August 2022 and January 2025, that qualified for bonuses would be eligible to receive them.[2] I detail the bonuses first, before elaborating each credit scheme individually.

In an attempt to strengthen the local or domestic economic impact of the IRA, several tax credit amplifiers were included in the legislation. These bonuses apply only to the energy production tax credits described in further detail below. Prevailing Wage and Apprenticeship eligible investments receive production or investment tax credits that are 400% or 450% larger than the baseline respectively. In practice, this entails that between 10-15% of the construction labor be performed by certified apprentices.[3] Local sourcing

[2] Summary of Inflation Reduction Act provisions related to renewable energy. 28 January 2025. *U.S. EPA*. https://www.epa.gov/green-power-markets/summary-inflation-reduction-act-provisions-related-renewable-energy. Accessed July 7, 2025.

[3] Insight into the Inflation Reduction Act: Prevailing Wage and Apprenticeship Bonus Credits. May 1, 2023. *Clean Energy Business Network*. https://www.cebn.org/media_resources/ira-labor-provisions/.

requirements or locating investments in Energy Communities improve either the production or investment tax credits by 80% or 167% respectively. The former entails that a certain percentage of materials are produced in the United States. This varies from product to product, for example 100% of iron and steel must be produced domestically, whereas for other components it is only 40%. For these lower thresholds, the requirement will become increasingly stringent moving forward.[4] Broadly, energy communities are those with substantial fossil fuel presence in the recent past and current unemployment. In particular, an energy project qualifies for the bonus if it is located in a "metropolitan or non-metropolitan statistical area that (1) has, at any time after 2009, had either at least 25% of local tax revenues related to certain fossil fuel activities (Fossil Fuel Tax Revenue) or at least 0.17% of local employment related to those activities (Fossil Fuel Employment) and (2) had an unemployment rate in the prior year equal or greater to the national average."[5] While this metric is time-varying given the unemployment criteria, roughly 900 counties met the criteria in 2024. In the following section, I provide more details on this status designation and compare it with the doubly-pressured status motivated in the main text.

Central to the IRA is the expansion to long-standing renewable energy tax credits with these amendments to existing portions of the Internal Revenue Code affect both investment (48E) and production (45Y). In place for nearly half a century, the Production Tax Credit and the Investment Tax credit provide eligible energy producers with either up front assistance in the development of clean energy production or on a per unit of energy

Accessed July 7, 2025.

[4]Treasury Releases New Guidance, Strengthening Incentives for Domestic Clean Energy Manufacturing. May 12, 2023. *The White House*. https://bidenwhitehouse.archives.gov/cleanenergy/tax-guidance-explainers/2023/05/12/treasury-releases-new-guidance-strengthening-incentives-for-domestic-clean-energy-manufacturing/. Accessed July 7, 2025.

[5]This definition comes from the Department of Energy. The 2024 Energy Communities can be found here: https://arcgis.netl.doe.gov/portal/home/item.html?id=d29343771fd14cc29877deded7122764.

produced basis. An enduring challenge for prospective energy investors in recent years has been the halted nature of tax credits with expiration and later retroactive application diminishing investor confidence and certainty.[6] Hence a key provision in the IRA is the guarantee of tax incentives until the U.S. electricity sector is at 25% emissions from a 2022 baseline, unless this has already been reached by 2035. This provides a decade minimum of guaranteed funding for whichever option producers choose.

Alongside this improved funding certainty, the IRA amends the existing tax code in a technology neutral fashion with a focus on zero-emissions energy production. The final regulation adopted by the IRS defines eligible facilities as those in "which the GHG emissions rate is not greater than zero" (p. 4009).[7] This represents a shift away from earlier efforts targeted primarily at wind and solar towards a funding approach that embraces a more diversified net-zero energy vector including biomass, geothermal, and carbon capture. Taken together, these revisions to the existing Production and Investment Tax Credit diversify and strengthen the public incentives for clean energy production.

Complementing the amendments to the energy policy tax structure, the IRA introduced novel clauses to the tax code for "advanced manufacturing" under section 45X. In a similar vein to above, the new section of the tax code is titled the Advanced Manufacturing Production Credit. Broadly, these novel tax incentives apply to the production of four types of goods: solar and wind energy components, inverts, qualifying battery components, and qualifying critical materials.[8]

For solar products, these components include: photovoltaic cells, photovoltaic wafers, polymeric backsheets, solar grade polysilicon, solar modules, structural fasteners, and

[6] Lips, B. 19 November 2024. The Past, Present, and Future of Federal Tax Credits for Renewable Energy. *North Carolina Clean Energy Technology Center*. https://nccleantech.ncsu.edu/2024/11/19/the-past-present-and-future-of-federal-tax-credits-for-renewable-energy/. Accessed July 7, 2025.

[7] Inflation Reduction Act. 90 Fed. Reg. 4006. (January 15, 2025).

[8] For further details on these components, see Section 45X(c)(1-6) of the Internal Revenue Code.

torque tubes. For wind energy, blades, nacelles, offshore wind foundations and vessels, and towers are eligible. In terms of batteries, electrode active materials, battery cells and modules are eligible. Finally, the following critical materials are included: aluminum, antimony, arsenic, barite, beryllium, bismuth, cerium, cesium, chromium, cobalt, dysprosium, erbium, europium, fluorspar, gadolinium, gallium, germanium, graphite, hafnium, holmium, indium, iridium, lanthanum, lithium, lutetium, magnesium, manganese, neodymium, nickel, niobium, palladium, platinum, praseodymium, rhodium, rubidium, ruthenium, samarium, scandium, tantalum, tellurium, terbium, thulium, tin, titanium, tungsten, vanadium, ytterbium, yttrium, zinc, and zirconium. Production Tax Credits for these any of the above products were effective as of December 31, 2022.

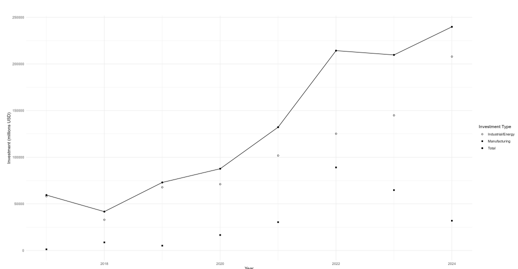
Broadly, these two categories align with the two categories of investment measurement in the Clean Investment Monitor: Energy and Manufacturing Respectively. In Figure A1, I visualize trends in all non-canceled investment (as of November 2024) that would be eligible for IRA tax credits by type of investment, doubly-pressured status, House of Representative partisanship, and Energy Community status. These descriptives provide some stylized facts about clean investment in the United States, both in the lead up to and after the passage of the IRA.

Most clean investment following the IRA has been predominantly in energy and industry applications. Beginning with Figure A1a, we see a general increase in industry and energy investment for most of the past decade, whereas manufacturing investment peaks in 2022 before dipping down in the past two years. In Figure A1b, I split logged investment trends by doubly-pressured status. These doubly-pressured counties are those with jointly above median import and emissions exposure. Given that only a third of all counties fit this description, average county investment is substantially higher for these counties.

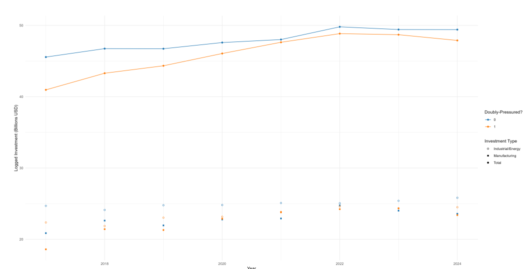
Third, in Figure A1c, I split clean investment trends by House Representative partisan affiliation. Raw trends highlight the large amount of green investment going to Republican parts of the country. This divergence is likewise reflected at the level of county averages. In 2024, counties within a Republican congressional district received roughly double the amount of clean investment (212 versus 108 million USD). Compared with 2018 when Republican-represented counties saw roughly 50% more investment, the trend is towards increased clean investment in those parts of the country most skeptical of climate change and the green transition (McCright, Dunlap and Marquart-Pyatt, 2016; Egan and Mullin, 2017). Finally, in Figure A1d, I visualize trends in clean investment by Energy Community status. While both types of counties see ample increases in investment, it is unclear how well this trend will persist as 2024 is the first year in which Energy Communities received less tax credit-eligible investment than previously. While non-ECs saw a slump in 2023, this rebounded in 2024.

Figure A1: Clean Investment Trends 2017 - 2024

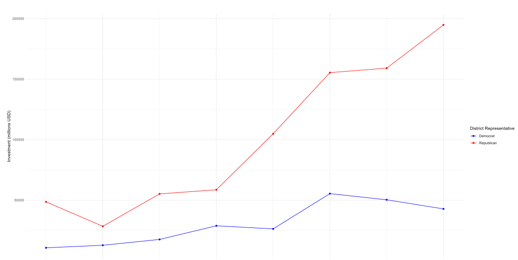
(a) Energy v. Manufacturing



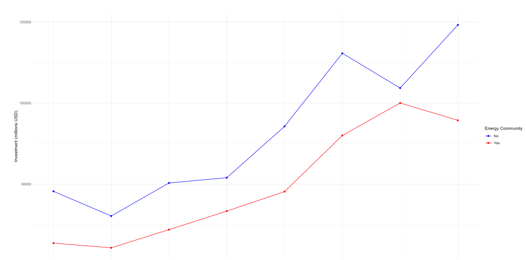
(b) Doubly-Pressured Status



(c) Partisanship



(d) Energy Community



A.1 Further Details on Community Types

In this subsection, I provide further descriptive data on the ideal types presented in Table 1. This includes referenced tables related to the local composition of industry and its emissions intensity as well as an analysis of the long-term manufacturing employment trends. Lastly, I demonstrate the strong temporal correlation between county emissions in 2012 and 2019 in Figure A2. Table A1 presents the top-5 industries for each county type. Data for the calculations come from the Bureau of Labor Statistics' Quarterly Economic Census.

Table A1: Top Industries by County Type

County Type	Industry	Average Employment Pct	Employment Rank
Doubly-Pressured	trade_pct	0.20	1
Doubly-Pressured	man_pct	0.17	2
Doubly-Pressured	edu_health_pct	0.13	3
Doubly-Pressured	leisure_pct	0.09	4
Doubly-Pressured	bus_prof_pct	0.08	5
Emissions-Pressured	trade_pct	0.20	1
Emissions-Pressured	edu_health_pct	0.14	2
Emissions-Pressured	leisure_pct	0.10	3
Emissions-Pressured	man_pct	0.09	4
Emissions-Pressured	bus_prof_pct	0.09	5
Trade-Pressured	trade_pct	0.19	1
Trade-Pressured	man_pct	0.14	2
Trade-Pressured	edu_health_pct	0.12	3
Trade-Pressured	leisure_pct	0.09	4
Trade-Pressured	bus_prof_pct	0.06	5
Non-Pressured	trade_pct	0.19	1
Non-Pressured	edu_health_pct	0.11	2
Non-Pressured	leisure_pct	0.10	3
Non-Pressured	man_pct	0.07	4
Non-Pressured	ext_pct	0.06	5

Table A2 presents county level averages of emissions intensity across the four types of communities for all sectors as well as just manufacturing. Emissions intensity calculations come from the U.S. EPA whereas employment data come from the U.S. Census' County

Business Patterns data for 2022. Calculations are made at either the NAICS3 or NAICS4 digit code depending on granularity of the estimates in the census data.

Table A2: Production Emissions Intensity (All Sectors)

County Type	Average	Employment Weighted Average	Std. Dev.
		All Sectors	
Doubly-Pressured	0.19	0.22	0.04
Emissions-Exposed	0.19	0.21	0.04
Non-Pressured	0.18	0.20	0.04
Trade-Exposed	0.17	0.18	0.02
		Manufacturing Sectors	
Doubly-Pressured	0.35	0.35	0.11
Emissions-Exposed	0.37	0.34	0.11
Non-Pressured	0.35	0.33	0.13
Trade-Exposed	0.32	0.33	0.10

Did manufacturing employment differ in the years following the China Shock across community types? Table A3 presents cross-sectional regressions assessing for variation in absolute and percentage changes in manufacturing employment across each of the four community types between 2012 and 2024. I focus on 2012, rather than 2008 to reduce noise introduced by the Financial Crisis. The intercept here is Non-Pressured communities. Emissions-Pressured communities have added some manufacturing jobs, but across each of the four types the manufacturing as a percentage of employment has stayed relatively stable. The St. Louis Branch of the Federal Reserve Bank estimates that U.S. manufacturing employment declined by roughly 0.75 p.p. during the same period, roughly similar to the sum of the reported coefficients in Model 2.

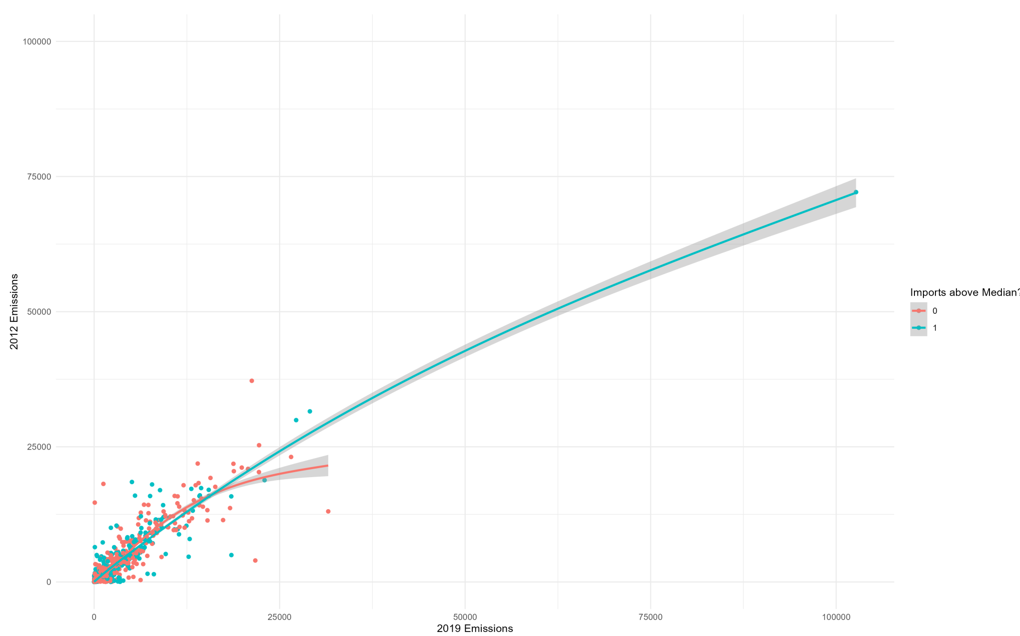
Finally, Figure A2 visualizes the correlation between emissions at the county level between 2012 and 2019. Emissions, while decreasing over that period track in a relatively linear fashion. Given that the primary measure of exposure is quartiled emissions, Figure A2 suggests little to no variation in measurement over such a time period.

Table A3: Change in Manufacturing Employment 2012-2024

	Absolute Change	Percentage Change
	Model 1	Model 2
Non-Pressured (Intercept)	74.250	−0.001
	(75.509)	(0.002)
Doubly-Pressured	169.584	−0.004
	(104.624)	(0.002)
Emissions-Pressured	454.781***	0.001
	(105.410)	(0.002)
Trade-Pressured	20.201	−0.002
	(105.648)	(0.002)
N	3026	3025

The models assess the change (absolute and percentage respectively) between 2012 and 2024 in manufacturing employment across the four ideal types of counties as presented in the 2 × 2. The St. Louis Fed estimates roughly a 0.75 p.p. decrease in manufacturing employment across the entire United States during the same period, in line with the sum of the reported coefficients. Aggregate data available here: https://fredblog.stlouisfed.org/2025/04/sizing-up-us-manufacturing/. *** p < 0.01, ** p < 0.05, * p < 0.1

Figure A2: County Emissions Trends (2012-2019)



A.2 Energy versus Doubly-Pressured Communities

In this subsection I provide additional details both conceptually and empirically about the policy-designed energy community status and my theoretically motivated doubly-pressured status. While both measures of risk to the energy transition incorporate to varying extents the economic risks of the green transition for fossil fuels as well as more general economic precarity, closer inspection suggests that energy and doubly-pressured communities are not too similar outside these general contours. I first provide descriptives and then demonstrate the robustness of the main results to controlling for energy community status. Finally, I replicate the analysis with energy community replacing doubly pressured status.

Figure A3: Energy Communities in 2024

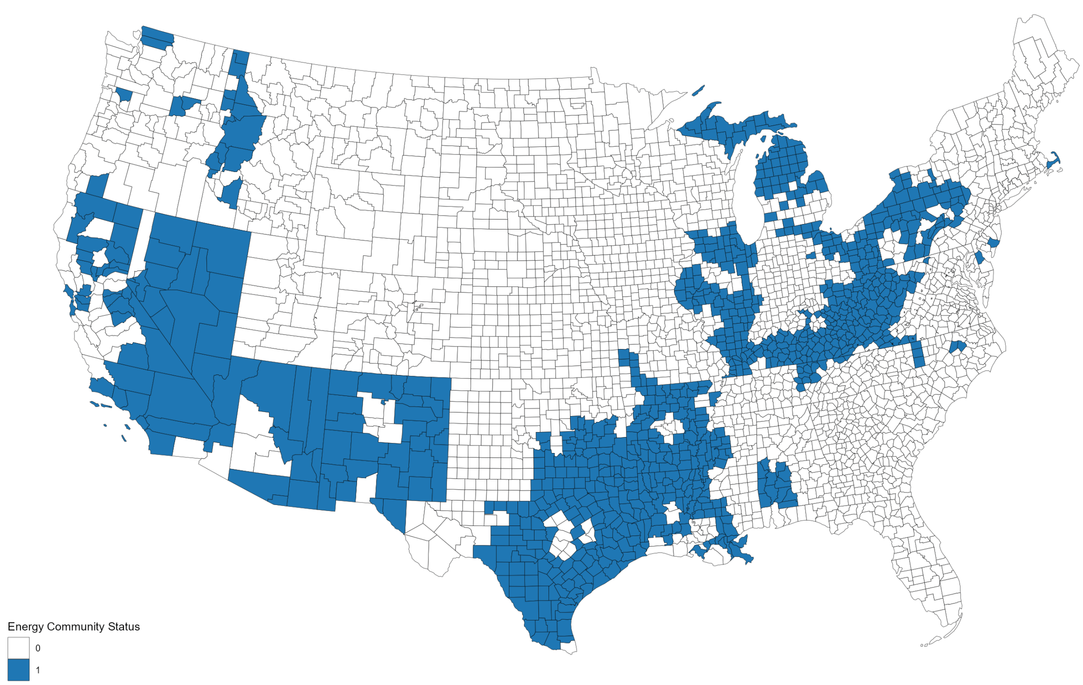


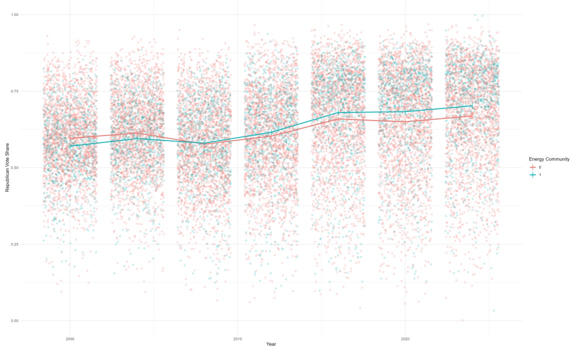
Figure A3 maps the distribution of counties receiving this designation. Energy communities are spatially clustered in a handful of states, predominantly in the Mid- and Southwest of the country. While there is some overlap between doubly-pressured and energy community status, the relationship is only weakly positive ($\beta = 0.07$). Table A4 presents the cross-tabulation of the policy-defined and my theoretically motivated risk measures, with only a small portion of counties being both energy and doubly-pressured communities (9%). Given that energy community status is driven by current unemployment trends and *fossil fuel* employment rather than CO_2 emissions more generally, the lack of overlap is unsurprising upon closer inspection. While fossil fuels certainly contribute to a county's emissions, they are but one source of carbon pollution, especially when the measure does not include their use in power generation or for manufacturing purposes. This focus on fossil fuel production greatly reduces the scope of potential communities at risk of concentrated costs in the green transition due to *carbon intensive* production methods, not just fossil fuel production.

Table A4: Cross Tabulation of Energy Community and Doubly-Pressured Status

	Not-Pressured	Doubly-Pressured
Non-EC	1745	541
EC	605	266

Of these counties roughly one quarter received an under construction or operational investment, slightly less than in doubly-pressured counties (33%). Nor were energy communities more likely to receive a greater share of announced or operational investments in terms of the logged capital expenditure. Figure A4 presents trends in voting outcomes across both measures of economic risk. In line with Gazmararian (2025), the top panel points towards communities with ample fossil fuel shifting increasingly towards the Republican party, especially after 2008. While starting from similar positions at the turn of millennium, doubly-pressured counties remain a few percentage points more democratic than their non-pressured peers throughout the entire study period. Visually, trends in voting appear roughly parallel among doubly-pressured counties; this is not the case in energy communities.

Figure A4: Voting Trends across Risk Subgroups



(a) Energy Community Status

(b) Doubly-Pressured Status

Note: Blue denotes Energy Communities or Doubly-Pressured counties respectively.

In Table A5, I probe the robustness of my primary results to the inclusion of energy community status as a control variable in the interacted models or subsetting on this dimension as well as consider any electoral consequences of investment in these communities. This second set of tests lets me assess whether the electoral consequences of investment in doubly-pressured counties is conditional on energy community status, providing me with another means of testing whether emissions alone is driving any results.

Model 1 replicates Column 4 in Table 2, albeit with an additional interaction term controlling for conditional impact of investment in energy communities. This additional control does not alter the results presented in the main text: investment in doubly-pressured communities is associated with a 2 p.p. shift towards the Democrats in 2024. In contrast, and perhaps somewhat surprisingly, investment in Energy Communities is predictive of a

3 p.p. shift in favor of the Republicans. In Model 2, I disaggregate further the measure of doubly-pressured risk with the only difference from the primary results being the attenuation of the interactive effect for highly exposed counties. Models 3 through 6 consider the electoral consequences of investment in a sub-group style analysis, splitting counties by energy community status. In non-energy communities, similar to the main results, we observe no relationship between investment and Republican vote share. In Model 4, I include the interaction term with doubly-pressured status to assess the robustness of the findings in Table 2. Even among non-energy communities, those that are doubly-pressured increasingly voted for the Democrats after receiving investment compared to their non-pressured peers. In Models 5 and 6, I perform the analogous regressions albeit among energy communities. Although, there is an average relationship between investment and Republican vote share (-3 p.p.), closer inspection reveals that this shift in voting patterns is driven by doubly-pressured communities that also happen to have energy community designation. Finally, in Model 7, I swap energy community and doubly-pressured status with the results corroborating earlier models: investment in energy communities is positively associated with Republican vote share.

Taken together, the analysis demonstrates the robustness of the main results in two ways. First, among the general sample of investment-receiving counties, doubly-pressured status consistently predicts a differential reaction to investment–one favoring the incumbent Democrats. Second, this differential impact of doubly-pressured status, while strong among ECs, is evident in communities with little to no fossil fuel employment, but a substantial amount of carbon emissions. Although, both energy community and doubly-pressured status target similar economic concerns at a high level, these results reinforce that it is not fossil fuel risk alone shaping the electoral consequences of investment, nor should GIP be considered compensation for fossil fuel country. Furthermore, although it does not appear

Table A5: EC Status and the Electoral Consequences of GIP

	Republican Vote Share						
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
Investment	-0.01	-0.00	-0.00	0.00	-0.03^{***}	-0.01	-0.01^{**}
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Investment × Doubly-Pressured	-0.02^{***}			-0.02^{**}		-0.05^{**}	
	(0.01)			(0.01)		(0.02)	
Investment × Low Exposure		0.01					
		(0.01)					
Investment × Some Exposure		-0.01					
		(0.01)					
Investment × Moderate Exposure		-0.03^{***}					
		(0.01)					
Investment × High Exposure		0.00					
		(0.01)					
Investment × Energy Community	0.03^{***}	0.03^{***}					0.03^{***}
	(0.01)	(0.01)					(0.01)
N	6948	6948	4848	4848	2100	2100	6948
Clusters	993	993	693	693	300	300	993
C-Zone × Year FE?			✓	✓	✓	✓	
Subset?	None	None	Non-EC	Non-EC	EC	EC	None
R^2	0.90	0.90	0.98	0.98	0.97	0.98	0.90
Adj. R^2	0.88	0.88	0.94	0.94	0.92	0.93	0.88

$^{***}p < 0.01$; $^{**}p < 0.05$; $^{*}p < 0.1$

that more capital expenditure has been targeted at energy communities, these investments, nevertheless do not appear to have helped the Democrats at the ballot box.

The above analysis demonstrates a difference in the voting patterns after investment in energy communities versus doubly-pressured counties. The plant-level nature of the emissions data lets me investigate this differential reaction further by measuring emissions strictly from manufacturing and fossil fuel production. While the concentrated costs of the green transition are more existential for fossil fuel production, this is not the case for the majority of traditional industries. While existing production practices mean these industries are emissions intensive *currently*, the proportion of process emissions, that is emissions that are inherent to the production process and thus cannot be avoided (e.g., from chemical reactions), represents a fraction of industrial emissions. This means that, while costly, an emissions-free production process is not impossible for many industries.

Furthermore, even those industries with substantial process emissions (e.g., cement), carbon removal technologies present a means of decarbonizing and continuing production that is fundamentally different in outlook from coal production. The existential threat of the green transition, then, is fundamentally lower, then for fossil fuel and in particular coal.

What does this mean for an explanation of electoral consequences? In contrast to uniform animosity towards the green transition and its policies among brown industry communities, manufacturing emissions are much more easily insulated from the concentrated costs of decarbonization ambition via electrification and specific innovations to eliminate emissions in hard to abate sectors, hence the green transition need not spell the end of manufacturing employment in post-industrial societies. Rather, GIP is particularly apt in communities with ample remaining manufacturing emissions to insulate them from future climate risk, but also redress past industrial decline through novel energy production and clean(-tech) manufacturing. Hence any electoral consequences should be concentrated in these communities rather than those whose decarbonization risk is driven by emissions from fossil fuel sectors.

Table A6 splits the emission data by source and tests for heterogeneity in voting patterns due to the type of brown industry in a community. MAN DP is the alternative coding of Doubly-Pressured status, albeit with manufacturing emissions replacing aggregate emissions. FF DP is the analogous measure but with fossil fuel emissions. EC continues to represent counties with energy community status. The results in Table A6 are consistent with heterogeneity *within* the set of communities often considered to be at heightened risk from climate action. Whereas fossil fuel doubly-pressured status does not predict an electoral response, communities with ample manufacturing emissions and import exposure consistently voted in higher numbers for the Democrats after receiving investment. This voting pattern holds regardless of the measure used to consider fossil fuel exposure.

Table A6: Splitting Decarbonization Exposure by Emissions Source

	Republican Vote Share			
	Model 1	Model 2	Model 3	Model 4
Investment	-0.01	-0.00	-0.01	0.00
	(0.01)	(0.01)	(0.01)	(0.01)
Investment × MAN DP	-0.02^{**}	-0.02^{**}	-0.02^{**}	-0.02^{*}
	(0.01)	(0.01)	(0.01)	(0.01)
Investment × FF DP		0.00		
		(0.01)		
Investment × EC			0.03^{***}	
			(0.01)	
Investment × FF Q2				-0.01
				(0.01)
Investment × FF Q3				-0.01
				(0.01)
Investment × FF Q4				-0.00
				(0.01)
N	6948	6948	6948	6948
R^2	0.97	0.90	0.90	0.97
Adj. R^2	0.94	0.88	0.88	0.94

$^{***}p < 0.01$; $^{**}p < 0.05$; $^{*}p < 0.1$

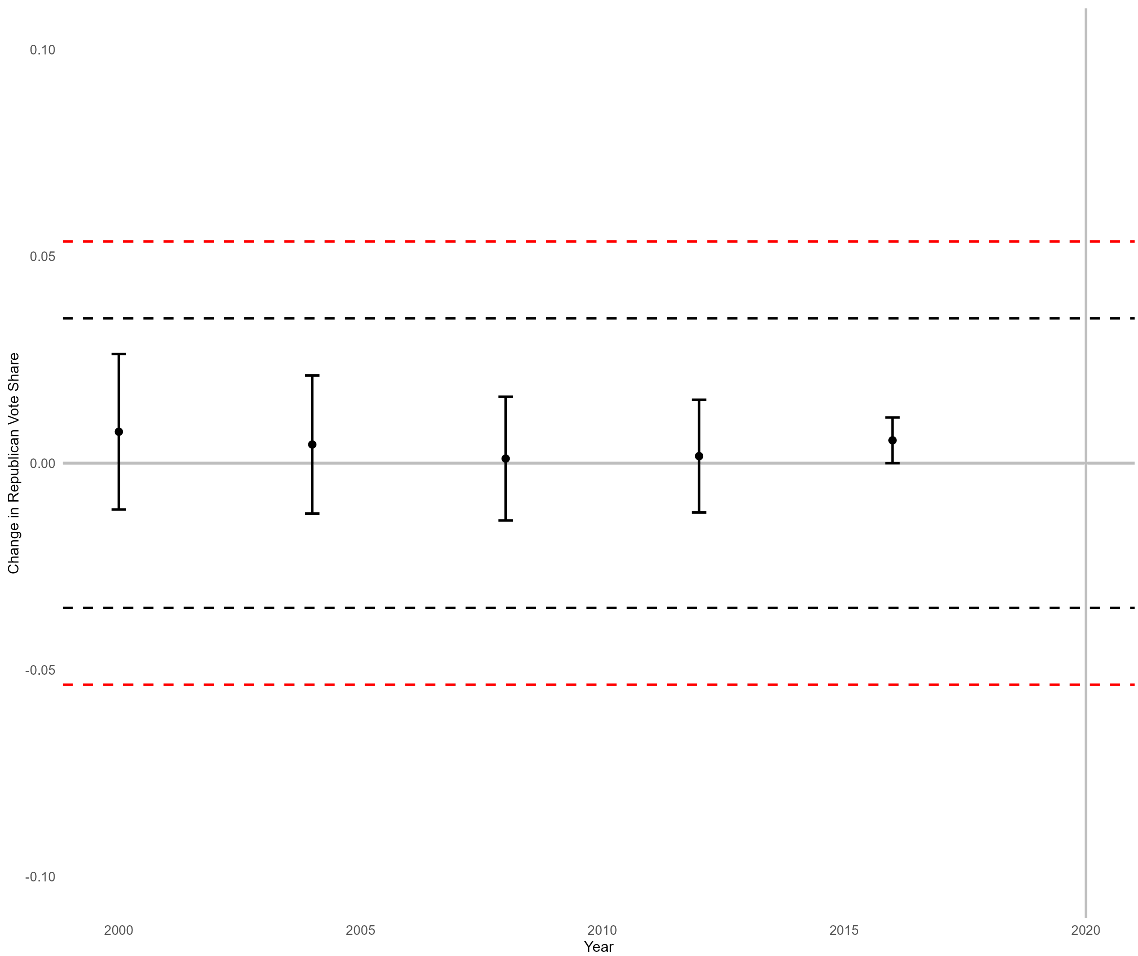
B Additional National Level Analyses

B.1 Full Regression Tables for Figures in the Main Text

B.1.1 Parallel Trends and Equivalence Tests

This appendix provides results from the regressions used to make Figure 5. For both sets of estimates, none of the pre-period point estimates are statistically distinguishable from zero using a 95% confidence interval cut-off. Given that the extent of statistical precision needed to merit a finding is somewhat arbitrary, I conduct an equivalence test to assess whether the pre-trend estimates fall within the joint equivalence range (Hartman and Hidalgo, 2018). Figure B1 presents the point estimates with these bands; all point estimates fall well within the equivalence range, substantiating the design's credibility.

Figure B1: Equivalence Test



Note: The outcome variable is the Republican Two Party vote share.

Table B1: Full regression results to produce Figure 5

	Democratic Vote Share
Investment × 2000	-0.01
	(0.01)
Investment × 2004	-0.01
	(0.01)
Investment × 2008	-0.01
	(0.01)
Investment × 2012	-0.00
	(0.01)
Investment × 2016	0.00
	(0.00)
Investment × 2024	-0.01
	(0.00)
Investment × DP × 2000	-0.01
	(0.01)
Investment × DP × 2004	-0.00
	(0.01)
Investment × DP × 2008	-0.00
	(0.01)
Investment × DP × 2012	-0.00
	(0.01)
Investment × DP × 2016	$-0.01^{\cdot}$
	(0.00)
Investment × DP × 2024	0.01^{**}
	(0.01)
N	6948
Counties	993
R^2	0.90
Adj. R^2	0.88

$^{***}p < 0.001$; $^{**}p < 0.01$; $^{*}p < 0.05$; $^{\cdot}p < 0.1$

B.1.2 Regression Results to produce Figure 6

This appendix provides the regression results used to produce Figure 6.

Table B2: Regression Results to produce Figure 6

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
treatment	0.00	-0.03	-0.01	-0.01	$0.02^{\cdot}$	0.03^{*}
	(0.01)	(0.02)	(0.01)	(0.02)	(0.01)	(0.01)
Sub Group?	NP	Emissions	Emissions	Trade	Trade	DP
Exclusive?		✓		✓		
N.	1861	378	1615	392	1617	1855
Counties	266	54	231	56	231	265
R^2	0.92	0.86	0.90	0.87	0.89	0.87
Adj. R^2	0.91	0.84	0.88	0.85	0.87	0.85

$^{***}p < 0.001$; $^{**}p < 0.01$; $^{*}p < 0.05$; $^{\cdot}p < 0.1$

B.2 Full Country Analysis

In this appendix, I present regression results that consider the effect of the IRA on voting, omitting any design-based approaches to mitigate selection concerns. I present two sets of specifications: (1) considering counties receiving no investment versus those receiving any investment signal, and (2) splitting counties by the investment type (i.e., none, announced, and under construction or operating). For each type of specification, I include the two-period difference-in-differences estimate as well as event study results. Table **??** presents the results: while investment is associated with a positive effect on Democratic vote share, it is also plagued by clear pre-trends in the event study designs. These divergences motivate the design-based approaches I take in the main text.

Table B3: Full Country Analysis

	Model 1	Model 2	Model 3	Model 4
treatment::Announced	-0.00			
	(0.00)			
treatment::Operating or Under Construction	0.02^{***}			
	(0.00)			
treatment::Any Investment		0.02^{***}		
		(0.00)		
year::2000:treatment::Announced			0.01	
			(0.01)	
year::2000:treatment::Operating or Under Construction			-0.04^{***}	
			(0.01)	
year::2004:treatment::Announced			0.00	
			(0.01)	
year::2004:treatment::Operating or Under Construction			-0.05^{***}	
			(0.01)	
year::2008:treatment::Announced			0.00	
			(0.01)	
year::2008:treatment::Operating or Under Construction			-0.03^{***}	
			(0.00)	
year::2012:treatment::Announced			-0.00	
			(0.00)	
year::2012:treatment::Operating or Under Construction			-0.02^{***}	
			(0.00)	
year::2016:treatment::Announced			$0.00^{\cdot}$	
			(0.00)	
year::2016:treatment::Operating or Under Construction			-0.00	
			(0.00)	
year::2024:treatment::Announced			-0.00	
			(0.00)	
year::2024:treatment::Operating or Under Construction			-0.00	
			(0.00)	
year::2000:treatment::Any Investment				-0.03^{***}
				(0.01)
year::2004:treatment::Any Investment				-0.04^{***}
				(0.01)
year::2008:treatment::Any Investment				-0.02^{***}
				(0.00)
year::2012:treatment::Any Investment				-0.01^{***}
				(0.00)
year::2016:treatment::Any Investment				-0.00
				(0.00)
year::2024:treatment::Any Investment				-0.00
				(0.00)
N	22025	22025	22025	22025
Counties	3156	3156	3156	3156
R^2	0.89	0.89	0.89	0.89
Adj. R^2	0.87	0.87	0.87	0.87

$^{***}p < 0.001$; $^{**}p < 0.01$; $^{*}p < 0.05$; $^{\cdot}p < 0.1$

B.3 Robustness Exercises

In this appendix, I present the various robustness exercises discussed in the main text. I group them by the substantive concern they address: (1) Selection and Threats to Inference, (2) Alternative Measurements, and (3) Alternative Specifications to Address Confounding.

B.3.1 Selection and Threats to Inference

This appendix presents three separate means of addressing how concerns related to selection into investment might bias inferences in the primary analysis. First, I assess whether there is any evidence of backlash to delayed project implementation *after* announcement. If this were the case, the results presented in the main text would arguably be driven by negative movement among the control group, weakening an explanation of electoral reward. Table B4 presents the results of two sets of regressions addressing this concern. Considering either the average effect of announcement, or its conditional effect in Doubly-Pressured counties, there is no evidence of backlash taking place. If anything, Doubly-Pressured counties that received announcements shifted towards the Democrats; albeit to extent that falls below conventional levels of statistical precision.

Second, I check whether there is evidence of the Democrats targeting investments to counties that might be electorally rewarding. To do this, I plot the empirical cumulative distribution of investment as a function of the Democratic vote share in 2020. A concern, for example, might be that investments were targeted at swing counties. This would take the form of a steep incline, or discontinuity, around the 50% mark, with little investment going towards the extrema of the vote share range. Figure B2 presents the results comparing counties that received any investment signal to all other counties. This assess electioneering strategies along in the extensive margin. Figure B3 focuses on the sample in the primary analysis considering only announced versus visible investment, thereby assessing along the

Table B4: Announced Investment and Backlash to Delayed Progress

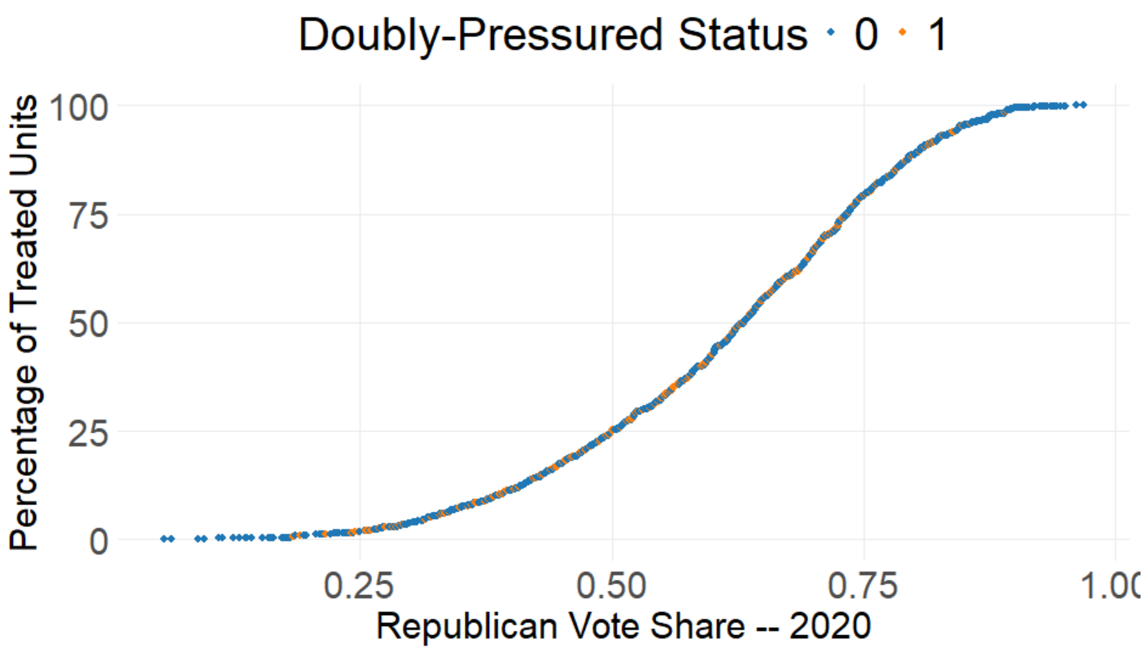
	Model 1	Model 2
Investment	0.00	-0.00
	(0.01)	(0.01)
Investment × Doubly-Pressured		0.01
		(0.01)
N	16512	16512
Counties	2361	2361
R^2	0.90	0.90
Adj. R^2	0.88	0.88

Investment is an indicator for announced investment, whereas the control group is those counties that received no investment signal. Counties that received visible investment are dropped from the sample.
$^{***}p < 0.001$; $^{**}p < 0.01$; $^{*}p < 0.05$; $^{\cdot}p < 0.1$

intensive margin (i.e., pushing or nudging investments along). In both distributions, there is no clear evidence of national-level Democrats using investments as an electioneering strategy.

Finally, I construct a matched sample using counties with either announced or no investment signals as the potential pool to select control units from. I opt for inverse propensity score weighting in the primary analysis given the absolute imbalance in the number of observations that are either treated or in control; most counties are treated. Resampling control units to achieve a balanced sample, for example in which a single county might be duplicated to serve as a control for several treated counties is not feasible in a fixed effects regression as unit indicators absorb any duplicates. Attempts at matching with the sample of counties that received some type of investment signal, therefore fail to generate a balanced sample. Propensity score weighting overcomes this issue, hence I use it as my primary strategy. I use the same set of covariates for matching as I use to generate the weights in the main text, with a larger pool of control units to select from imbalances are effectively eliminated (see Table B5 and Figure B4 matching coverage in

Figure B2: Empirical CDF of Investment (Entire Country)



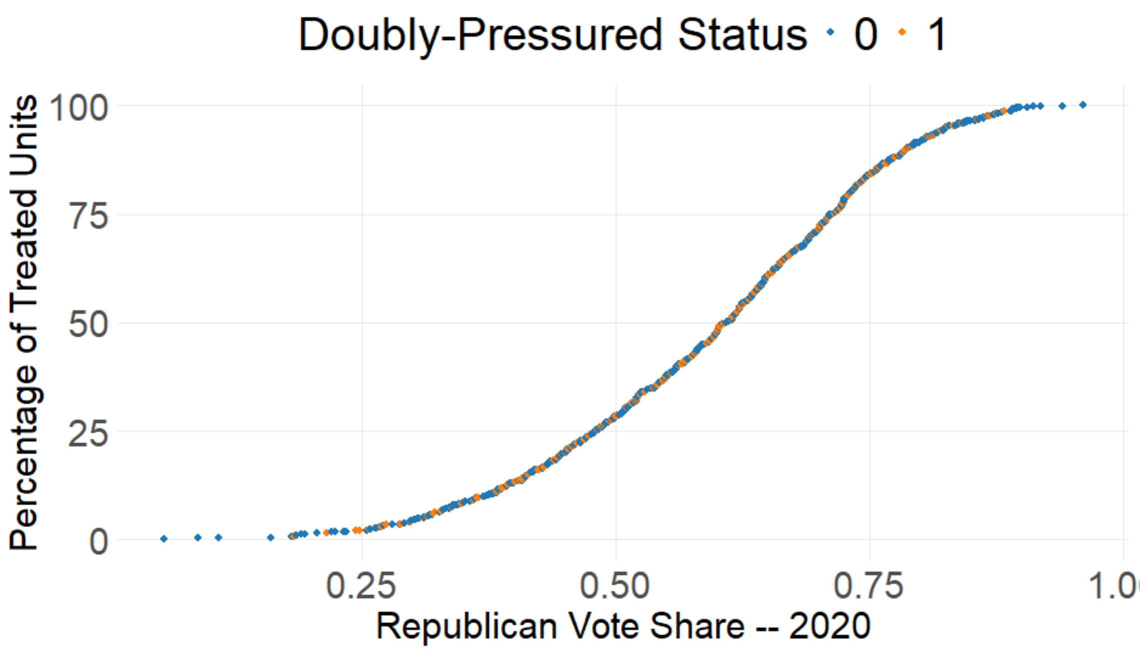
terms of propensity scores). Table B6 presents the results. The general pattern identified above continues to hold although the marginal effect of investment in Doubly-Pressured counties attenuates ($\beta = 0.11, p = 0.12$). A similar pattern holds with the manufacturing emissions result in Model 5. The conditional effect is fully robust in Model 5.

Finally, Table B7 presents the results using the entire country as a sample.

B.3.2 Alternative Measurement Strategies

In this appendix, I present results utilizing alternative measurement strategies. As an alternative to Doubly-Pressured, I disaggregate this binarized measure and split counties into discrete groups based on the sum of their exposure along each quartiled dimension. Table B8 presents both conditional and marginal effects using this alternative covariate measure with similar results to the main text.

Figure B3: Empirical CDF of Investment (Sample)



With respect to the treatment measure, I generate two measures along the intensive margin: (1) the logged total capital expenditure on operating or under construction projects, and (2) the proportion of investment that is either operational or under construction. Tables B9 and B10 present the results of each analysis respectively. While some of the point estimates attenuate with the proportional measure, in general the patterns across the various measures closely follow the main results.

Table B5: Covariate Balance Before and After Matching

Covariate	Means Treated	Means Control	Std. Mean Diff.	Var. Ratio	eCDF Mean	eCDF Max	Std. Pair Dist.
Before Matching							
distance	0.3691	0.2015	0.8135	2.0367	0.2619	0.3868	
log_pop	11.1490	9.9442	0.8490	1.2481	0.2418	0.3647	
log_gdp	9.8183	9.7247	0.4291	1.1864	0.1357	0.2274	
pct_male	0.4941	0.4958	-0.1008	0.7107	0.0256	0.0556	
pct_white	0.8157	0.8565	-0.2591	0.9370	0.1139	0.1900	
pct_hisp	0.0928	0.0523	0.2652	2.0715	0.1378	0.2039	
age	36.4648	37.6722	-0.4548	0.8535	0.1289	0.2005	
pct_labor_force	0.4811	0.4701	0.2187	0.8506	0.0686	0.1193	
pct_unemploy	0.0272	0.0261	0.1275	0.4978	0.0556	0.1172	
pct_poverty	0.1247	0.1405	-0.2728	0.8281	0.0780	0.1186	
After Matching							
Covariate	Means Treated	Means Control	Std. Mean Diff.	Var. Ratio	eCDF Mean	eCDF Max	Std. Pair Dist.
distance	0.3691	0.3350	0.1654	1.5917	0.0145	0.1021	0.1656
log_pop	11.1490	10.9538	0.1375	1.3495	0.0234	0.0981	0.4749
log_gdp	9.8183	9.8148	0.0161	1.0697	0.0119	0.0424	0.9444
pct_male	0.4941	0.4943	-0.0125	1.0181	0.0164	0.0491	0.9664
pct_white	0.8157	0.8322	-0.1046	1.0865	0.0301	0.0623	0.9695
pct_hisp	0.0928	0.0752	0.1152	1.3526	0.0354	0.0915	0.6710
age	36.4648	36.5511	-0.0325	0.9775	0.0080	0.0305	0.9924
pct_labor_force	0.4811	0.4846	-0.0701	1.0133	0.0170	0.0531	1.0598
pct_unemploy	0.0272	0.0265	0.0862	0.5401	0.0390	0.1048	1.1284
pct_poverty	0.1247	0.1201	0.0788	1.2285	0.0164	0.0358	0.9809

Table B6: Regression results with Matched Sample

	Democratic Vote Share				
	Model 1	Model 2	Model 3	Model 4	Model 5
Investment	-0.00	-0.01	0.01	-0.01	-0.00
	(0.00)	(0.01)	(0.01)	(0.01)	(0.01)
Investment × DP				0.02^{*}	
				(0.01)	
Investment × Man. DP					0.01
					(0.01)
Investment × FF DP					-0.01
					(0.01)
Counties?	All	Non-DP	DP	All	All
Estimate	ATE	Marginal	Marginal	CATE	CATE
N.	10546	6955	3591	10546	10546
Counties	1508	995	513	1508	1508
R^2	0.89	0.90	0.88	0.89	0.89
Adj. R^2	0.88	0.88	0.86	0.88	0.88

$^{***}p < 0.001$; $^{**}p < 0.01$; $^{*}p < 0.05$; $^{\cdot}p < 0.1$

Figure B4: Coverage of Matched Sample

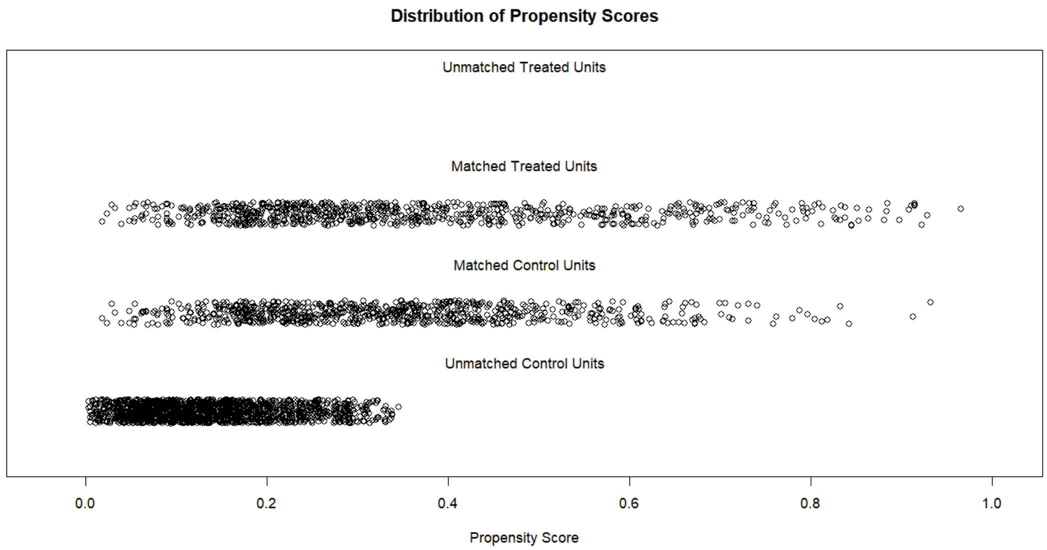


Table B7: Entire Country Analysis

	Democratic Vote Share				
	Model 1	Model 2	Model 3	Model 4	Model 5
Investment	0.00	−0.00	0.01·	−0.00	0.00
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Investment × DP				0.02*	
				(0.01)	
Investment × Man. DP					0.01
					(0.01)
Investment × FF DP					−0.01
					(0.01)
Counties?	All	Non-DP	DP	All	All
Estimate	ATE	Marginal	Marginal	CATE	CATE
N	21787	16138	5649	21787	21787
Unique Counties	3115	2308	807	3115	3115
R^2	0.90	0.90	0.87	0.90	0.90
Adj. R^2	0.88	0.89	0.85	0.88	0.88

$^{***}p < 0.001$; $^{**}p < 0.01$; $^{*}p < 0.05$; $^{\cdot}p < 0.1$

Table B8: Disaggregated Measure of Doubly-Pressure Status

	Model 1	Model 2	Model 3	Model 4	Model 5
Investment	0.00	-0.01	0.03^{*}	0.02	0.05^{*}
	(0.01)	(0.02)	(0.01)	(0.02)	(0.02)
I × Exposure (3)	-0.02	-0.00			
	(0.02)	(0.02)			
I × Exposure (4)	-0.01	0.01			
	(0.01)	(0.02)			
I × Exposure (5)	-0.00	0.01			
	(0.01)	(0.02)			
I × Exposure (6)	$0.02^{\cdot}$	0.04^{*}			
	(0.01)	(0.02)			
I × Exposure (7)	0.02	0.04^{*}			
	(0.01)	(0.02)			
I × Exposure (8)	-0.02	0.02			
	(0.01)	(0.02)			
Estimate	CATE	CATE	Marginal	Marginal	Marginal
N	6948	6948	1518	896	231
Counties	993	993	217	128	33
C-Zone × Year FE?		✓			
R^2	0.90	0.97	0.89	0.88	0.88
Adj. R^2	0.88	0.94	0.87	0.86	0.86

Note: Exposure is the sum of the emissions and import quartiles. Counties with values greater than 6 on this measure are Doubly-Pressured in the operationalization used in the main text. Robust standard errors clustered at the commuting zone. $^{***}p < 0.001$; $^{**}p < 0.01$; $^{*}p < 0.05$; $^{\cdot}p < 0.1$

Table B9: Capital Expenditure and Vote Share

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8
Investment	0.00	−0.00	0.01*	−0.00	0.00	0.00	−0.00	−0.00
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Log CAPEX × Doubly-Pressured				0.01**			0.01*	
				(0.00)			(0.00)	
Log CAPEX × Low Exposure								−0.00
								(0.00)
Log CAPEX × Some Exposure								0.00
								(0.00)
Log CAPEX × Moderate Exposure								0.00*
								(0.00)
Log CAPEX × High Exposure								0.00*
								(0.00)
N	6948	4533	2415	6948	4533	2415	6948	6948
Counties	993	648	345	993	648	345	993	993
R^2	0.89	0.90	0.87	0.90	0.98	0.97	0.97	0.97
Adj. R^2	0.88	0.89	0.85	0.88	0.95	0.90	0.94	0.94
C-Zone by Year FE?					2289	1246	3080	3080

$^{***}p < 0.01$; $^{**}p < 0.05$; $^{*}p < 0.1$

Table B10: Proportion of Visible Investment and Expenditure

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8
Investment	0.00	−0.00	0.02	0.00	0.00	0.01	−0.00	−0.00
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.02)	(0.01)	(0.01)
Investment × Doubly-Pressured				0.01			0.02**	
				(0.01)			(0.01)	
Investment × Low Exposure								−0.01
								(0.01)
Investment × Some Exposure								0.00
								(0.01)
Investment × Moderate Exposure								0.02**
								(0.01)
Investment × High Exposure								0.02**
								(0.01)
N	6948	4533	2415	6948	4533	2415	6948	6948
R^2	0.89	0.90	0.87	0.89	0.98	0.97	0.97	0.97
Adj. R^2	0.88	0.89	0.85	0.88	0.95	0.90	0.94	0.94
C-Zone by Year FE?					2289	1246	3080	3080

$^{***}p < 0.01$; $^{**}p < 0.05$; $^{*}p < 0.1$

B.3.3 Alternative Sources of Confounding

In this appendix, I address concerns about confounding that are not immediately addressed by the combination of unit and time fixed effects as well as the inverse propensity score weighting scheme. These include: (1) Commuting zone by year and (2) state by year fixed effects, as well as no weights. The latter demonstrates that the results in the main text are no derivative of the weighting scheme. Tables B11, B12, and B13 presents the respective results. The core pattern identified in Table 2 remains all three sets of models. The only difference is that all point estimates are inflated in the model omitting weights. This suggests that selection is still a concern given the similarity in results between the matched sample results in Table B6 and the main results: Absent weighting to account for selection into treatment results are biased.

Table B11: Robustness: Commuting Zone by Year Fixed Effects

	Democratic Vote Share				
	Model 1	Model 2	Model 3	Model 4	Model 5
Investment	0.01	0.01	$0.02^{\cdot}$	0.00	0.00
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Investment × DP				0.03^{**}	
				(0.01)	
Investment × Man. DP					0.03^{**}
					(0.01)
Investment × FF DP					0.01
					(0.02)
Counties?	All	Non-DP	DP	All	All
Estimate	ATE	Marginal	Marginal	CATE	CATE
N	6948	4533	2415	6948	6948
Counties	993	648	345	993	993
C-Zone × Year FE	3080	2289	1246	3080	3080
R^2	0.97	0.98	0.97	0.97	0.97
Adj. R^2	0.94	0.95	0.90	0.94	0.94

$^{***}p < 0.001$; $^{**}p < 0.01$; $^{*}p < 0.05$; $^{\cdot}p < 0.1$

Table B12: Robustness: State by Year Fixed Effects

	Democratic Vote Share				
	Model 1	Model 2	Model 3	Model 4	Model 5
Investment	0.01	-0.00	0.02^{*}	-0.00	-0.00
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Investment × DP				0.03^{**}	
				(0.01)	
Investment × Man. DP					0.03^{***}
					(0.01)
Investment × FF DP					0.00
					(0.01)
Counties?	All	Non-DP	DP	All	All
Estimate	ATE	Marginal	Marginal	CATE	CATE
N	6948	4533	2415	6948	6948
Counties	993	648	345	993	993
State × Year FE	342	335	259	342	342
R^2	0.93	0.95	0.92	0.93	0.93
Adj. R^2	0.92	0.93	0.89	0.92	0.92

$^{***}p < 0.001$; $^{**}p < 0.01$; $^{*}p < 0.05$; $^{\cdot}p < 0.1$

Table B13: Investment, Deindustrialization Risk and Democratic Vote Share (No IPS Weights)

	Democratic Vote Share				
	Model 1	Model 2	Model 3	Model 4	Model 5
Investment	0.03***	0.02*	0.04***	0.02***	0.02***
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Investment × DP				0.02*	
				(0.01)	
Investment × Man. DP					0.04***
					(0.01)
Investment × FF DP					0.02
					(0.01)
Counties?	All	Non-DP	DP	All	All
Estimate	ATE	Marginal	Marginal	CATE	CATE
N	6948	4533	2415	6948	6948
Counties	993	648	345	993	993
R^2	0.89	0.90	0.88	0.89	0.89
Adj. R^2	0.88	0.89	0.85	0.88	0.88

$^{***}p < 0.001$; $^{**}p < 0.01$; $^{*}p < 0.05$; $^{\cdot}p < 0.1$

B.4 Extensions

B.4.1 Individual Panel Results

In this section, I replicate the national-level analysis with an alternative data source: the CES 2020-2024 panel survey. Administered every 2 years, the CES typically consists of a time-series cross-sectional format, however the panel survey permits an analogous analysis to the main text, but at the individual, rather than community level. The primary difference is that rather than rely on commuting zone by year fixed effects to assess potential heterogeneity at the local-level, the insufficient number of observations for many zones reduces statistical power, hence I opt for state by year to account for time trends varying by geography. To probe the robustness of my main results, I rely on a several variables from the panel that I describe below.

The first item asks respondents whether they approve of the IRA. Respondents were provided with a headline description of the policy, including both climate and clean energy funding amounts. The second item is the standard approval rating for former President Joe Biden. Finally, the third and fourth variables considered in Table B14 use respondents vote choice to measure trends in voting behavior for either the Democratic or Republican parties respectively.

In Table B14 I consider whether investment in doubly-pressured counties had a differential impact on individual preferences and voting behavior. On support for the IRA, there is no evidence of a differential response: Investment in non-pressured counties is associated with a 4 p.p. increase in support with no additional difference in doubly-pressured counties. While investment increased support for Biden's landmark climate bill, approval of the former President did not change in either group of counties. Finally, in terms of voting trends, I find similar results to the county-level findings: whereas investment is not predictive of a change in voting patterns in non-pressured counties, individuals in doubly-pressured counties were 3 p.p. more likely to vote for the Democratic party in 2024 compared to 2020. Whereas individuals in either type of county viewed policy more favorably after witnessing its impact, this only translated to a shift in voting behavior in areas with higher risk of deindustrialization.

Table B14: CES 2020-2024 Panel Results

	IRA Approval	Biden Approval	Vote Democratic	Vote Republican
Investment	0.04^{***}	-0.01	-0.00	0.01
	(0.02)	(0.02)	(0.01)	(0.01)
Investment	-0.00	-0.01	0.03^{*}	-0.02
× Doubly-Pressured	(0.03)	(0.02)	(0.02)	(0.02)
N	10818	10818	8520	8520
Clusters	5415	5415	5262	5262
R^2	0.86	0.94	0.97	0.97
Adj. R^2	0.72	0.88	0.93	0.91

All models include respondent and state by year fixed effects. Models 1 and 2 include the 2022 and 2024 CES waves. Models 3 and 4 include the 2020 and 2024 waves. Robust standard errors clustered at the respondent. $^{***}p < 0.01$; $^{**}p < 0.05$; $^{*}p < 0.1$

B.4.2 France

In this section, I assess the external validity of my findings by considering the empirical evidence in another post-industrial society: France. I briefly describe the data sources for this analysis; the regression equation is analogous to the one in the main text. Emissions data come from the European Union Emissions Trading System Register and are aggregated to the district level from disclosures at the production site level. I use import data from Meyerrose and Watson (In Press) who construct analogous imports per worker measures in the French context as Autor, Dorn and Hanson (2013). Clean investment data come from the French Ministry for the Ecological Transition (ADEME). The ministry provides geo-located data on state aid for the green transition, a broader set of interventions than those included in the main analysis. I generate two measures of investment with these data. The first is a binary indicator for Investment if a district received any climate investment in the inter-election period. The second is the logged expenditure of these investments in the inter-election period.

Voting data comes from the French Ministry of the Interior. I analyze presidential voting in Metropolitan France during the 2017 and 2022 elections, focusing on the electoral fortunes of Macron's party as well as the far-right Front National, the most similar party to the Republicans in terms of economic and climate positions. Given that French presidential elections typically include more than two candidates that perform better than similar third-party candidates in the U.S., I present results individually for each party as well as in a two-party vote style as is typical in the latter context. All models include department by year fixed effects to again account for local trends. Given that it is impossible to reliably assess pre-trends with these data as Macron created the party prior to his election in 2017, I consider the results descriptively and eschew any causal interpretation.

Columns 1 and 2 present results for the far-right Front National along the extensive

Table B15: Investment, Doubly-Pressured Status and French Presidential Voting

	Front National Vote		Macron Vote		FN Two Party Vote	
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Investment	2.02^{***}		1.26		0.00	
	(0.31)		(1.07)		(0.01)	
Investment × Doubly-Pressured	-0.51		2.45^{***}		-0.04^{***}	
	(0.49)		(0.60)		(0.01)	
Expenditure (log)		0.15^{***}		0.08		0.00
		(0.02)		(0.06)		(0.00)
Expenditure (log) × Doubly-Pressured		-0.04		0.17^{***}		-0.00^{***}
		(0.03)		(0.04)		(0.00)
Num. obs.	1070	1070	1070	1070	1070	1070
R^2	0.99	0.99	0.89	0.89	0.99	0.99
Adj. R^2	0.97	0.97	0.78	0.78	0.97	0.97

$^{***}p < 0.01$; $^{**}p < 0.05$; $^{*}p < 0.1$

and intensive margins of investment respectively. Investment predicts an increase in support for the far-right, although there is not a larger increase in doubly-pressured counties. Given the strong trend in far-right performance over the past decade, it may be that investment targets economically at risk areas. These investments are conducted directly by the state or in partnership with local firms, meaning that the state, unlike firms, may have an alternative preference for investment than profit maximization. In both measurement strategies, the increase in Front National vote share is smaller in doubly-pressured areas, but this difference is not statistically distinguishable from zero. Columns 3 and 4 consider incumbent support. There is evidence consistent with the U.S. results: investment in doubly-pressured districts is associated with a larger increase in votes for Macron. Finally, Columns 5 and 6 present consider the Front National two-party vote share. In line with the results from the first four columns, climate investment in doubly-pressured districts is associated with a shift away from the far-right relative to Macron. Put differently, while both parties have seen their overall vote shares increase relative to the remaining parties in the French party system, investment in doubly-pressured districts is associated with a largeer shift towards the incumbent, whereas in the remaining districts it has no impact.

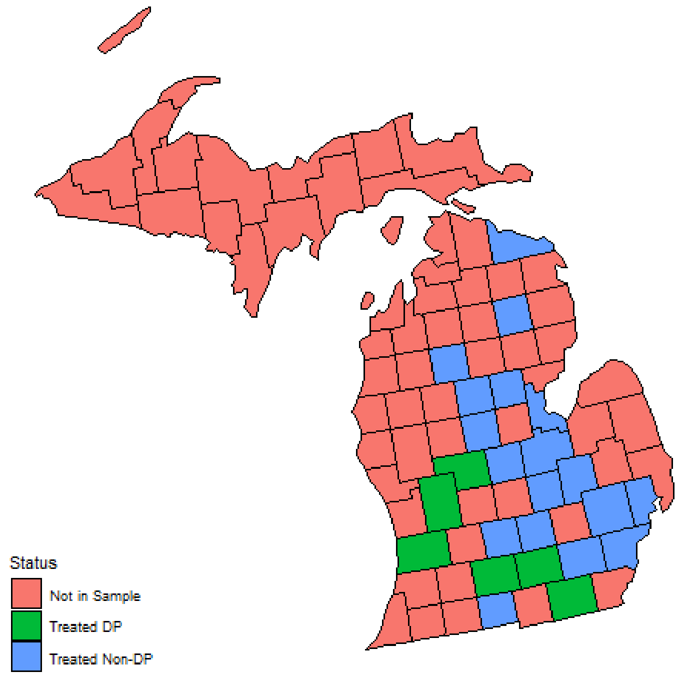
These results provide preliminary evidence of the external validity of the above findings. A few points are worth emphasizing. First, given similarities in the French and U.S. electoral systems (e.g., majoritarian, presidential elections), these findings may not travel as cleanly to other post-industrial societies with alternative electoral systems. For instance, in proportional systems in which the incumbent may be a coalition rather than a single leader, benefits to the incumbent may be split across multiple parties diminishing effects or attribution may be more difficult. At the same time, France is a more centralized state than the U.S., suggesting that the extent of federalism does not appear to play a strong role in shaping electoral reactions to clean investment.

C Michigan Analysis

C.1 Quantitative Data Collection and Generating Process

Data for the distance analysis comes from two state sources: (1) the Secretary of State, and (2) the Bureau of Elections for precinct voting data and shapefiles respectively. As noted in the main text, a challenge of assessing over time trends in voting at the level of the precinct is that geographic boundaries frequently change to ensure that precincts maintain a common size with respect to population. In some cases this meant ample change from election to election, whereas in more rural counties in Northern Michigan there was little to no observable changes in the shapefiles between 2016 to 2024. To address these challenges, I build on other work using precinct-level panels (Longuet-Marx, 2024) and create grid cells that enable a consistent measure of voting behavior under the assumption that population is uniform within precinct. Population density can of course vary across precincts as they naturally differ in size. Given that counties have not changed in size over the period of analysis (2016-2024), this means that an overlaid grid can be used to calculate a given precinct's share of a given grid, and under the uniformity assumption its

Figure C1: Sample and Treatment Status for Michigan Counties



vote totals and Republican vote share. In Figure C1, I visualize the sample and treatment status of Michigan counties.

The data pipeline consisted of several steps to take this raw data and generate such panel of precinct voting records. First, I used within-county fuzzy matching to link geographic data to the voting records. These data were then read in QGIS. From here, I first used county shape files and generated a within county grid using 25 km^2 as the area. I then merged each election year precinct shapefiles to these grids and calculated the intersection between a given precinct and grid cell. This intersection serves as the weight for the two party vote total and Republican vote total calculations. With the area weight of each grid-cell precinct calculated, the election-year merged shape files were read back into R for aggregation.

Given that a given grid-cell may be composed of a fraction of a single precinct to several precincts depending on the area (e.g., a rural area in the Upper Peninsula versus metro-Detroit), there is ample variation across grid cells in the number of voters. With consistent grid-cells, this means however that there is little variation election-year by election-year in the registered population for any given grid cell. Republican vote shares were calculated with the following formula for grid cell i:

$$\text{RVS}_{it} = \sum_{pi} \text{Turnout}_{pt} + \text{Intersection Weight}_{(pi)t} + \text{RVS}_{pt} \tag{3}$$

where Turnout is the total number of voters in a given precinct (p) in a given election year (t), Intersection Weight is the share of the area a given precinct in a given grid cell and RVS is the Republican two-party vote share in that precinct. Finally, for each county with an investment I calculated the distance in meters from a grid cell centroid to the closest investment (in the case there were two), whereas for all other counties this distance variable took a value of zero. I utilize Conley standard errors with a 180 kilometer cut-off. I choose this cut-off based off a back of the envelope calculation about the largest distance within most Michigan counties (60km). Given that most counties are roughly square-shaped this is the diagonal between opposing corners. To incorporate counties that are close by and may influence the results, I multiply this by 3 to account for potential spillovers beyond the county. Alternative cutoff measures do not consistently alter the results. While the results in Table 5 omit these counties without investments, the positive result on the interaction between doubly-pressured status and distance is robust to the inclusion of all counties as evidenced in Table C1.

Figure C2: Event Study Design with Full Sample

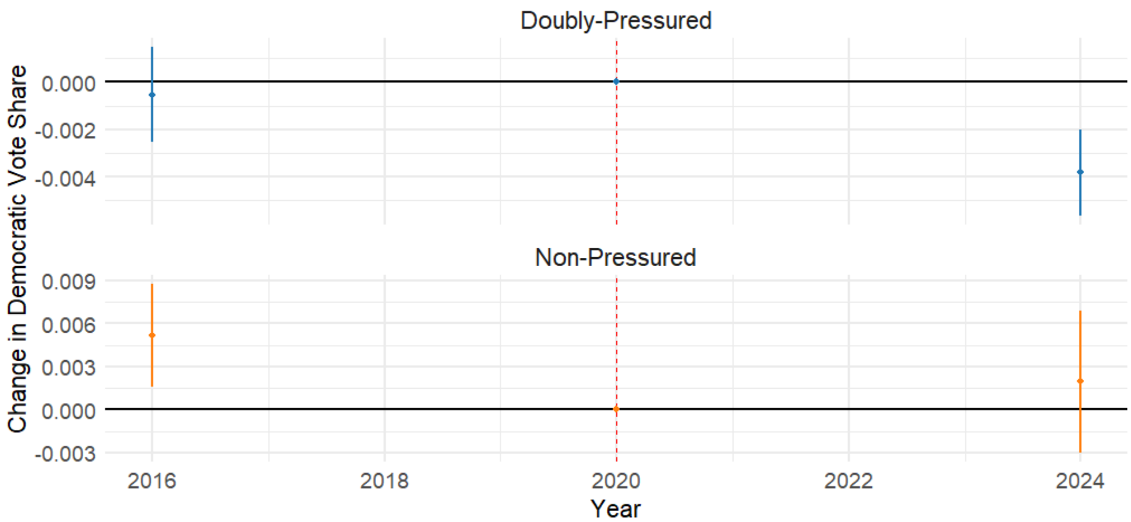


Table C1: Full Sample Replication of Table 5

	Republican Vote Share		
	Model 1	Model 2	Model 3
Investment	0.01^{***}		
	(0.00)		
Investment × Doubly-Pressured	-0.01^{***}		
	(0.00)		
Investment × Distance	-0.00	-0.00	
	(0.00)	(0.00)	
Investment × Distance × Doubly-Pressured	0.00	0.00^{***}	
	(0.00)	(0.00)	
Investment × Distance (log)			-0.00
			(0.00)
Investment × Distance (log) × Doubly-Pressured			0.01^{***}
			(0.00)
County-Year FE		✓	✓
Standardized β	0.03	0.05	0.04
N	6223	6223	6223
R^2	0.98	0.99	0.99
Adj. R^2	0.97	0.98	0.98

$^{***}p < 0.01$; $^{**}p < 0.05$; $^{*}p < 0.1$

C.2 IRA Implementation and Local Media Coverage

For investment to have any impact on voting behavior requires that voters are aware of investment and see it as changing the local economic trend. To substantiate these conditions of the argument, I collected local media coverage of clean investment in a set of counties in Michigan. These data likewise let me consider variation in local framing of investments. Beyond media coverage, I collected local descriptions of economic development in planning documents and from county economic development corporations, semi-private organizations tasked with facilitating economic planning and strategies to attract businesses. These let me assess whether doubly-pressured counties portray themselves in a different fashion than non-pressured counties. Considering a single state is of course a difficult test of any such differences as frames may spill over geographically. Nevertheless, I find that doubly-pressured counties are more likely to have local coverage of investment and that these counties auto-descriptions are more framed around encouraging economic revitalization. Prior to discussing these data, I briefly overview state-level developments related to the IRA in terms of policy and politics to provide a fuller picture of the situation on the ground.

Michigan has been one of the most heavily invested in states for clean energy and advanced manufacturing since 2022.[1] This comparatively large amount of investment is at least partially attributable to the state-level policies that have been layered on top of the IRA to further attract firms. Such policies include the Michigan Climate Investment Fund, which assists local actors in securing federal funding.[2] The automotive industry

[1] Davidson, Kyle. January 17, 2025. "Michigan remains on top in clean energy projects, new study says." *Michigan Advance*. https://michiganadvance.com/2025/01/17/michigan-remains-on-top-in-clean-energy-projects-new-study-says/. Accessed July 15, 2025.

[2] See for example, the state website which provides further details on the investment fund and hub: https://www.michigan.gov/egle/about/organization/climate-and-energy/mi-healthy-climate-plan/funding/ggrf/investment-accelerator

in particular has seen ample state-level incentives amounting up to $5 billion through mechanisms the Strategic Outreach and Attraction Research (SOAR) Fund[3] alongside the Make it in Michigan Competitiveness Fund.[4] These state-level initiatives serve as "leverage to capture federal dollars" and function as a means to "help Michigan communities that have seen manufacturing jobs disappear and re-create the prosperity they once enjoyed."[5] Whereas other states have witnessed a higher concentration of clean energy projects rather than green manufacturing projects, the distribution in Michigan is more balanced across the two groups of eligible investments.[6] Survey data from Data for Progress finds that roughly two-thirds of respondents from Michigan support the IRA following a brief explanation of its purpose.[7] This is in line with national averages from the Yale Program on Climate Change Communication which also finds that roughly 43% of voters were aware of the IRA.[8]

These local political developments have charged the debate around renewable energy and clean manufacturing investments with Democratic candidates increasingly embracing the tax incentive approach championed by Biden and Whitmer as a means of bringing manufacturing jobs back to Michigan.[9] In contrast, local Republicans, while avoiding coming out against job creation and business investment, have solidified around an "all of the above" energy strategy which removes the government's ability to "pick winners

[3] Gardner, Paula. June 12, 2024. "Where mega battery, EV projects stand after $1 billion in Michigan subsidies". *Bridge Michigan.* A.1. Accessed 12 July 2025.

[4] Hendricksen, Clara. February 24, 2024. "Whitmer seeks clean energy companies". *Battle Creek Enquirer.* Accessed July 10, 2025.

[5] Ibid.

[6] Based off of author's calculations from Clean Energy Monitor Data.

[7] "State-level Support for the Inflation Reduction Act". *Data for Progress.* https://www.dataforprogress.org/inflation-reduction-act-polling. Accessed July 15, 2025.

[8] Ballew, M., Verner, M., Rosenthal, S., Maibach, E., Kotcher, J., & Leiserowitz, A. (2023). *Who is most supportive of the Inflation Reduction Act?* Yale University and George Mason University. New Haven, CT: Yale Program on Climate Change Communication.

[9] See for example, House Representative Debbie Dingell's Climate position, which emphasizes the need for "comprehensive efforts to spur innovation in the economy, technology, and society" and to "explore all policy options". https://debbiedingell.house.gov/issues/issue/?IssueID=16223.

and losers" – in essence a rejection of GIP for pure market forces.[10] The provision of investment assistance to these projects is increasingly associated with the Democrats both at the state and national level in news articles that mention the Inflation Reduction Act generally.[11] Furthermore, coverage of the election in terms of clean energy clearly linked a Trump election with a potential decrease in incentive support.[12,13]

In general then, Michigan has seen a high level of private investment following the IRA with state-level politics closely aligning with national policy in terms of partisanship. In Table C2 I document the investments and whether local coverage existed on the investment with investments grouped by county and pressure status. I sourced local newspapers from the Local Newspaper Initiative at Northwestern University.[14] I picked these six counties as they had the largest number of investments for doubly- and non-pressured counties in Michigan. Within each newspaper I used a search dictionary including the following terms: clean energy, batteries, solar, and wind. While coverage existed on these topics generally, I only considered coverage to have taken place for an investment if it mentioned the specific location within county or the firm investing. Given that the Clean Investment Monitor provides both firm and location identifiers this was straightforward.

Across these six counties, local news coverage was higher in doubly-pressured counties compared to non-pressured ones. More importantly however was the difference in coverage

[10]See for instance, 4th district House representative, Bill Huizenga's (R) stance on energy, one that is echoed by most Michigan Republicans: https://huizenga.house.gov/issues/issue/?IssueID=23825. Accessed July 13, 2025.

[11]Mascaro, Lisa. August 15, 2023. "'Bidenomics' delivered a once-in-generation investment. It shows the pros and cons of policymaking. *Associated Press*. https://apnews.com/article/biden-ira-congress-ev-bidenomics-4d1e74d2cf21326e8833885972ad2891. Accessed July 15, 2025.

[12]House, Kelly. November 8, 2024. "What a Donald Trump presidency means for Michigan's environment." *Bridge Michigan*. https://bridgemi.com/michigan-environment-watch/what-donald-trump-presidency-means-michigans-environment/. Accessed July 15, 2025.

[13]House, Kelly. October 14, 2024. "Michigan a top winner of climate funds Trump wants to revoke." *Bridge Michigan*. https://bridgemi.com/michigan-environment-watch/michigan-top-winner-climate-funds-trump-wants-revoke/. Accessed July 15, 2025.

[14]https://localnewsinitiative.northwestern.edu/

Table C2: Investments and Local News Coverage

#	Investment	County	Doubly-Pressured?	Local Coverage?
1	Ford Blue Oval	Calhoun	✓	✓
2	Cereal City Solar	Calhoun	✓	✓
3	Shipsterns Solar	Calhoun	✓	
4	River Fork Solar	Calhoun	✓	✓
5	Consumers Energy	Calhoun	✓	✓
6	Samsung SDI America	Oakland		
7	FLO	Oakland		
8	Novi	Oakland		✓
9	Bollinger Motors	Oakland		
10	Dunamis Clean Energy	Oakland		
11	Rhombus Energy	Wayne		
12	BorgWarner	Wayne		
13	Nel Hydrogen	Wayne		✓
14	Fortescue	Wayne		
15	DTE	Wayne		✓
16	DTE	Wayne		
17	Greenstone Solar	Branch		✓
18	Branch Solar	Branch		✓
19	DTE	Branch		✓
20	Marsen	Montcalm	✓	✓
21	DTE	Montcalm	✓	✓
22	Blue Elk Solar I	Lenawee	✓	✓
23	Blue Elk Solar IV	Lenawee	✓	✓

This table provides the raw data and measurement to compare coverage rates on investment in the most heavily invested counties in Michigan. Local sources were taken from the the Local News Initiative. I used the following sources: *Battle Creek Enquirer* (Calhoun), *Oakland Free Press*, *Daily Tribute* (Oakland), *Detroit Free Press* (Wayne), *The Daily Reporter* (Branch), *Lakeview Area News* (Montcalm), *Tecumseh Herald* (Lenawee). On each newspaper website, I search the following terms: “solar”, “clean energy”, and “batteries” and then manually searched between August 2022 and November 2024. Given that many newspapers are syndicated each newspaper contained ample national coverage on the IRA, with the *Detroit Free Press* furthermore tracking state-wide developments to a greater extent than the other papers.

of investment between them. Investments covered by the *Battle Creek Enquirer* a daily local and national news to Calhoun County highlighted the tax revenue implications, in particular for local schools in its coverage of the new solar farms.[15] Beyond these benefits, there was an emphasis on the local construction and manufacturing jobs. Once such investment (# 4) combined a solar plant with a biodigester to produce natural gas leveraging existing agro-industrial assets preventing the partnering dairy farm from going out of business.[16]

Local tax and employment benefits are likewise emphasized in non-pressured counties. For example, coverage of the Coldwater River Solar Project (# 19) highlights that neighboring property owners will receive compensation for changes to the environment due to construction, even if they did not lease their property to the solar development.[17]

While local news media in both doubly- and non-pressured counties rarely explicitly mentioned the IRA or state-level initiatives in coverage of local investments the state-level political competition and news coverage of these topics more generally suggests voters can align continued public support for these investments with the Democrats and little to no such support with the Republicans. This media coverage suggests that rather than firm investments being invisible to local voters, they are part and parcel of community politics. Firms seeking to make these investments, especially for novel production sites need to secure community approval.

[15] When passing through Battle Creek, residents were generally aware of the solar fields being developed in the community and were happy to provide me with further tips on how to get to them from the interstate. They did, however, question whether my Fiat 500 would handle some of the roads that were in need of repair from the high frequency of trucks passing through the town due to the construction. Both solar fields in the county being developed are located in areas close to the i-94 interstate and therefore see substantial traffic suggesting that they are not invisible to local residents. While stopping at one such solar field, roughly 10 cars passed in less than half an hour in the middle of a working day.

[16] Steele, Greyson. June 6, 2024. Groundbreaking Ceremony: Consumers Energy breaks ground on new AgriEnergy center near Battle Creek. *Battle Creek Enquirer*. Accessed July 10, 2025.

[17] Reid, Don. September 4, 2024. "Apex Clean Energy starts work on Coldwater River Solar Power Park for DTE". *Coldwater Daily Reporter*. Accessed July 13, 2025.

County economic planning and development documents highlight how doubly-pressured communities describe themselves as industry-based, despite significant losses to these parts of the workforce in recent years. Manufacturing employment is described as the "backbone" of Montcalm County and the Greater Grand Rapids region by its regional development organization, with industries such as aerospace and defense, alternative energy, automotive, food processing, and medical devices being emphasized.[18,19] Similar portrayals of the local community emerge in other doubly-pressured communities. In Jackson County, the local business development organization in its podcast to advertise the area, said, "Manufacturing is definitely the key industry here, right. It's one of those key drivers that makes Jackson County who we are. It defines not only where we've come from as a community, but it's also going to play a large role in where we are heading in the future as well."[20] These documents also highlight the unique opportunity presented by recent carrot-based policy: "The recent wave of federal programs to support infrastructure, re-shoring manufacturing, and job creation present a unique opportunity for economies, like Greater Grand Rapids, with a strong manufacturing industry presence."[21]

C.3 Local Media Coverage in Indiana and Wyoming

To assess the external validity of the news coverage results in Michigan above, I collected data on local news coverage in two additional states: Indiana and Wyoming. These were selected given the stronger performance of the Republican party in each state. Whereas Indiana is similar to Michigan in terms of its manufacturing sector, Wyoming's economy is

[18] The Right Place. 2025. Advanced Manufacturing Report. https://www.rightplace.org/regional-industries/industry-reports/manufacturing-report. Accessed July 18, 2025.

[19] The Right Place. 2022. Strategic Plan 2023-2025. https://www.rightplace.org/about-us/strategic-plan. Accessed July 18, 2025.

[20] Accelerate Jackson County. 2025. "EP#1 - A Focus on Manufacturing". https://acceleratejackson-county.org/ep1-a-focus-on-manufacturing/. Accessed July 9, 2025.

[21] The Right Place. 2022. Strategic Plan 2023-2025. https://www.rightplace.org/about-us/strategic-plan. Accessed July 18, 2025.

predominantly driven by the energy sector. In each state, I focused on counties that had received more than one investment between August 2022 and November 2024. In Wyoming, two counties fit this criteria: Carbon and Laramie. In Indiana, there were sixteen such counties. In Wyoming, neither Carbon or Laramie counties are doubly-pressured; both had little import exposure in the first decade of the 21^{st} century. Just over half of the counties in Indiana (10/16) are doubly-pressured. The data collection process was analogous to above. I consulted the Local News Initiative for a list of local newspapers and then searched for references to the investments on websites when possible. Table C3 presents the results for both states aggregated to the county.

Table C3: Local Media Coverage of Investment (Indiana & Wyoming)

County Code	Name	State	Doubly-Pressured?	Coverage?
18007	Benton	Indiana	No	✓
18009	Blackford	Indiana	No	
18045	Fountain	Indiana	No	
18055	Greene	Indiana	No	
18065	Henry	Indiana	Yes	✓
18067	Howard	Indiana	Yes	✓
18073	Jasper	Indiana	Yes	✓
18075	Jay	Indiana	Yes	✓
18089	Lake	Indiana	Yes	✓
18125	Pike	Indiana	Yes	✓
18129	Posey	Indiana	Yes	
18131	Pulaski	Indiana	No	✓
18141	St. Joseph	Indiana	Yes	✓
18159	Tipton	Indiana	No	
18177	Wayne	Indiana	Yes	
18181	White	Indiana	Yes	✓
56007	Carbon	Wyoming	No	
56021	Laramie	Wyoming	No	
		Group Average		
Non-Pressured			0.25	
Doubly-Pressured			0.8	

Similar to above, among Indiana and Wyoming counties receiving multiple investments, local media coverage is more frequent in doubly-pressured counties. This coverage documented similar local benefits to investments as in Michigan. In describing the development of a battery storage facility in Pike County Indiana, the local news construed the investments as part of a "balanced and responsible energy transition." while also noting that the investments qualified for tax credits under the Inflation Reduction Act, in particular related to the Energy Community bonus.[22] Coverage in White County highlighted local benefits to landowners leasing their property to windfarm developers with these payments estimated to total $37 million alongside nearly $50 million to local governments.[23] The importance of local benefits from clean energy development is likewise emphasized by Jay County Councilor, Bryan Alexander who, during the debate over the Big Beautiful Bill which would have removed some of the tax incentives under the IRA, argues "Even though the Inflation Reduction Act of 2022 was far from perfect, it provided significant tax credits that have spurred billions in clean energy investment across the country — including right here in Portland and Jay County, Indiana." He continues by remarking, "Clean energy has also become a lifeline for local governments. Revenue from wind and solar projects is one of the only sustainable ways we have to fund essential services like roads and public safety without relying solely on grants. In Jay County, this is a practical solution with real results."[24]

[22] "IURC approves Pike County stand-alone battery energy storage system." 25 January 2024. *The Press Dispatch.* https://www.suncommercial.com/press_dispatch/news/article_9458b770-2aa2-5677-92bc-c9345b17777f.html.

[23] "EDP Renewables celebrates the start of construction on the Indiana Crossroads II Wind Fame." 4 October 2022. *Monticello Herald Journal.* https://www.newsbug.info/monticello_herald_journal/news/edp-renewables-celebrates-the-start-of-construction-on-theindiana-crossroads-ii-wind-farm/article_89e74e5c-1d54-54dd-828d-68d28c670515.html.

[24] Alexander, Bryan. 19 June 2025. "Keep renewable energy momentum." *The Commercial Review.* https://www.thecr.com/news/2025/jun/18/keep-renewable-energy-momentum/.

D Data Availability

The raw investment data from the Rhodium Group is not permitted to be openly shared in a repository. The aggregated data that is included in the final analyses is too coarse to be reverse engineered, however. The replication materials contain data protocols to take the raw data and generate these variables for individuals who sign the same agreement with Rhodium Group that I signed. Replication materials will contain instructions on how to access the raw data.